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Increasing Safety Belt Use by ______High Risk Drivers

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16. Abstract

The objectives of this study were to: 1) identify groups of non-belt users who are most likely to become involved in highway crashes and 2) develop and test communication programs designed to increase safety belt use by one or more of these groups. The study was conducted in two phases. In Phase I, non-belt users who are over-involved in crashes were identified, documented and categorized into homogeneous groups. For each group, behavior modification programs and communication channels were identified. Phase I was completed with the determination that it would be feasible and cost-effective to implement programs to increase belt use in the following groups: Young Males (18-24), All Drinkers, Elderly (over 65), Unemployed Males, and Smokers. Phase I included extensive literature searches and analysis to identify groups and programs. The young male group was selected for Phase II because this group is at higher risk of crash than all other drivers and are reported consistently as non-belt users. A contest through a radio station targeted at this age group was selected as the medium for the buckle-up message. The program was called Make It Click! and was conducted at WKMX-FM, Dothan, AL. Drivers collected prizes if they were observed using safety belts in cars bearing a contest sticker. The message was widely heard by all age groups as determined by a survey of the listening area, but safety belt use as assessed by systematic observation did not increase. Follow-up research determined that the use of vehicle stickers was not popular with the target group and that the contest was viewed as too complicated for the modest size of the prizes. Recommendations for implementing future programs with high risk groups are provided.

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I. INTRODUCTION

This is the final report for contract number DTNH-88-C-07273 between the National Highway Traffic Safety Administration and Dunlap and Associates, Inc.

Safety belts became a permanent feature on newly manufactured automobiles in this country during the 1960's. In the 1970's, three point lap and shoulder harness systems were installed in most new cars and belts of some kind were found in most of the vehicle fleet. Research on the value of belts in saving lives and reducing injuries consistently showed that many lives could be saved and many serious injuries could be reduced if everyone buckled up.

Several national and local efforts were conducted during the 1970's and early 1980's to promote voluntary belt use. Unfortunately, the majority of drivers did not buckle up. Voluntary belt use as measured in several observational surveys during this period tended to show that belt use ranged from only about 10 percent to 20 percent. Higher figures were reported in response to various localized promotions or incentive programs, but the more typical figures were in this very low range. It was also found during this period that those drivers who did buckle up were some of the least likely drivers to be involved in a crash, thus further limiting the likelihood that a belt would reduce injuries (see e.g., Evans and Wasielewski, 1983).

Belt use rates changed dramatically during the mid 1980's as states began to pass mandatory belt use laws. The first of these states was New York which reported a belt use rate as high as 60 percent among some subgroups soon after implementation of the law (see e.g., Rood et al., 1987). Belt use in New York dropped during the following months (see e.g., Williams et al., 1987) but was still substantially higher than during the preceding years. By the end of 1988, 33 states had mandatory belt use laws, and the current total is 37 states and the District of Columbia.

Unfortunately, as laws were passed and research results became available, it was again found that those most likely to buckle up were least likely to become involved in crashes. In New York, it was found that young drivers, drinking drivers and high speed drivers were less likely to respond to the mandatory belt use law than other motorists (Preusser et al., 1986, 1987, 1988). Similarly, in Michigan and North Carolina it was found that unbelted drivers were typically high crash-risk drivers (Wagenaar et al., 1987; Hunter et al., 1988). Clearly, while belt use laws have been successful in inducing many more drivers to buckle up, their injury-reduction effectiveness is limited by the fact that those who do buckle up, at least initially, are least likely to be involved in crashes.

The purpose of the present study was to identify those high risk drivers who are not responding to existing buckle-up efforts, including mandatory belt use laws, and then to develop programs that will reach these groups. Such groups could be identified as "young" or "drinkers" or other such generic terms. However, to the extent possible, it was considered preferable to develop the characteristics of these groups as specifically as possible. Certainly, not all young drivers nor all drinkers fail to wear belts, and it was thus considered essential to attempt to identify additional distinguishing characteristics. Such characteristics could help identify the most appropriate communication channels and strategies for targeting buckle up programs.

The objectives of the present study were to: 1) identify appropriate target groups of non-belt users who are most likely to become involved in a crash and 2) develop and test programs tailored to increase safety belt use by the selected target groups. These objectives were pursued in a phased approach. Phase I was directed toward five, more detailed objectives to:

- Identify and document groups of non-belt users who are over-involved in crashes
- Further categorize these non-belt users into homogeneous groups
- Identify behavior modification programs that have addressed these groups, and assess the success of such programs (in terms of belt use)
- Identify appropriate communication channels for each
- Estimate the feasibility of influencing each group to increase safety belt use.

At the conclusion of Phase I, a determination was made that is was likely feasible as well as costeffective to develop programs aimed at increasing belt use among high risk drivers. Therefore, the study continued into Phase II with the objectives of developing and testing in a realistic setting one or more programs designed to increase safety belt use by a selected target group.

This report is organized sequentially: it proceeds through the activities involved in meeting the objectives of Phase I and then describes the Phase II development and test. It concludes with a description of follow-up research involving additional data collection which was mounted to help gain a better understanding of the test results obtained. The results of that follow-up research are then presented. The final Section of the report presents conclusions and recommendations based on the total study effort. Four appendices contain supporting material.

II. PHASE I: TARGET GROUP SPECIFICATION

A. OVERVIEW

This Section describes the selection of target groups for the development of buckle up programs and materials. Given the purview of this study, each of these groups should consist of individuals who are at substantial risk for being involved in a crash and who are relatively less likely to wear safety belts than the population at large.

Four separate and characteristically different activities were conducted to identify these groups. The first was a structured literature review consisting of a detailed examination of selected recent documents. The second was an analysis of the most recently available Fatal Accident Reporting System (FARS) data tape (1987), and the third was an analysis of recent state crash data from Michigan and Ohio (1985-1987). Lastly, the 1987 data tape from the Behavioral Risk Factor Surveillance System, which is a telephone survey effort structured and organized by the Centers for Disease Control (CDC), was analyzed to relate the question on self-reported seat belt use to demographic information and other health risk factor measures contained in the survey.

Clearly, the focus of these efforts was on recently available data. Safety belt use in the United States has changed markedly over the past few years with the adoption of mandatory belt use legislation in the majority of states. Some of these laws were in place in 1985; more states were added in 1986. Most of the data analyzed in this Section were drawn from 1987 when just over half of the states had mandatory belt use laws. It was felt that any data taken from an earlier time might not be representative of the situation that exists today. Certainly, the differences in belt use rates from 1984 to 1987 have been substantial, and, therefore, concentration was placed on 1987 data which were the most recently available data in mid to late 1988 when these analyses were conducted.

Each of the four analysis activities described has built-in biases and limitations. The literature, for the most part, covers a time when belt use in the United States was barely higher than 15 percent. FARS covers only those drivers who were involved in fatal crashes, a particular subset of all crashes. FARS would also tend to have a high proportion of unbelted drivers since wearing a belt would lower the likelihood of fatal crash involvement. The state crash data suffer from the bias that some drivers will tell a police officer that they were wearing a belt when in fact they were not at the time of the crash. This should be particularly true after the implementation of mandatory seat belt use legislation (Michigan in July of 1985 and Ohio in June of 1986). Lastly, the CDC survey data suffer from the obvious bias that what people say on the telephone may not necessarily represent what they do in their cars. It is considered fortunate, however, that the biases and limitations across the four analysis activities are characteristically different. This supports the conclusion that any finding which is consistent across these very different activities probably represents a real effect or at least one worthy of research concentration by the present study.

The application of these analysis activities resulted in the specification of five potential target groups for the development of buckle up materials and programs. All of these groups have a basis in prior literature. Most of the groups are directly indicated by FARS and the state crash data; none are contraindicated. All of the groups are indicated in the CDC survey data. The five groups are:

• 18-24 year old males (particularly unmarried with lower socioeconomic status and lower educational attainment)

- Drinkers (younger, with lower socioeconomic status and lower educational attainment)
- Elderly in states without mandatory safety belt use laws
- Unemployed males (with lower socioeconomic status)
- Smokers (younger).

B. LITERATURE REVIEW

The first step in identifying high risk groups that tend not to wear safety belts was to review recent literature in the field. After a thorough literature search, 11 documents were selected for a detailed review. These documents covered some of the most recent work as well as the more comprehensive efforts. As a group, these documents also represent a range of different types of efforts including literature review, driver record analysis, crash data analysis and survey research. The objective was to identify candidate groups as a guide to structuring the subsequent analysis of the crash and survey data.

The results of this review are summarized in Table 1 with respect to groups that tend not to wear safety belts and Table 2 in terms of groups that tend to be at high risk for crash involvement. The rows of each Table indicate the group that the various authors have identified and the columns reference, by number, the 11 documents. The body of the Table indicates whether the authors found (F) a particular result in the referenced study or whether they found the result in previous literature that they reviewed (L). The eleven documents are introduced below with complete citations in the Reference Section:

- 1. CM3 Associates (1987) A review of recent literature on high risk groups.
- 2. Evans (1987) Comparison of driver records (crash and violation histories) for those motorists who were observed to be belted and unbelted
- 3. Evans and Wasielewski (1983) Comparison of driver records for belted and unbelted motorists
- 4. Hunter et al. (1988) Comprehensive examination of North Carolina drivers including survey, observation and driver record techniques
- 5. McGartt et al. (1987) New York's mandatory seat belt law
- 6. Preusser et al. (1988) Comparison of driver records for belted and unbelted motorists
- 7. Preusser et al. (1986) Comparison of driver records for belted and unbelted bar patrons
- 8. Preusser et al. (1987) Observations of teenage belt use
- 9. Rood et al. (1987) New York's mandatory seat belt law

Table 1. Predominate Non-Users of Safety Belts

Legend: L = Cited in review of literature F = Finding of study

	Found in Document No.										To	Totals		
Non-User Characteristics	1	2	3	4	5	6	7	8	9	10	11	L	F	
Young drivers (e.g., 16-25 years)	L		F	F		L	L,F	L,F	F	F	F	4	7	
Male Drivers	L		F				F	L,F	F	F		2	5	
Drivers of older cars	L		F				F				F	1	3	
Drivers of larger cars	L		F								F	1	2	
Lower income (socio-econ. status)	L			F				L		L,F		3	2	
Lower educational attainment	L			F						L		2	1	
Fewer family respon. (single)	L											1	0	
Married and below 25 years old										F		0	1	
Poorer repair of cars	L											1	. 0	
Lower mileage per day	L											1	0	
Value personal over societal														
concerns	L									L		2	0	
Drivers of trucks, vans, full and								•						
intermediate size cars	L											1	0	
Feel that belts are restricting,														
inconvenient, not helpful in														
accidents, sometimes unsafe	L									L		2	0	
Multiple offenders (prior		_	_											
violations)		<u>L</u>	F								F	1_1_	2	
Nighttime drivers (10PM-6AM)		F							-	L		1	1	
Closer followers (short headway)			<u>L</u>		 	<u>L</u>				L	,	3	0	
Higher accident rates			F								F	0	2	
No passengers in vehicle			F									0	1	
Drivers in single vehicle														
accidents			 	<u> </u>				· · · · · · · · · · · · · · · · · · ·				0	1	
Drivers in rollover accidents				F								0	1	
Drivers charged with violations				F								0	1	
Older drivers				F						L		1	1	
Drivers who run red lights						<u>L</u>						1	0	
Teenagers enroute to school						<u>L</u>		- 				1	0	
Night patrons at bars	- ·· · · · · · · · · · · · · · · · · ·					L	F					1	1	
Drinking (e.g., while driving;						-	-							
to intoxication)						L	L			F		2	1	

Table 1. Predominate Non-Users of Safety Belts (cont'd)

Legend: L = Cited in review of literature F = Finding of study

·	Found in Document No.									To	Totals		
Non-User Characteristics	1	2	3	4	5	6	7	8 .	9	10	11	L	F
Lowest speeds		-7	<u> </u>			F						0	1
Highest speeds No driver education completed						F						0	1
No driver education completed								F				0	1
Female front seat passenger over 16 years old				<u> </u>					F			0	1
Domestic cars										L		1	0
Non-using friends										L		1	0
Non-using passengers										L		1	0
Non-favoring of legislation										L		1	0
Non-favoring of legislation Perceived low risk of enforcement										L		1	0
Smokers										L		1	0
Minority ethnic backgrounds Drivers in urban environments	_									F		0	1
Drivers in urban environments										F		0	1

Legend: L = Cited in review of literature F = Finding of study

				Foun	d In	Docume	nt No	•		·			otals
High Crash-Risk Characteristics	1	2	3	4	5	6	7	8	9	10	11	L	F
Young drivers (e.g., 16-25 years)	L		F	F		L,F	L	L			L,F	5	4
Male drivers	L		F	F	L	F					F	2	4
Drinking drivers						L	L					$\frac{2}{2}$	0
Beer drinkers	L							·				- -	0
Higher accident rates			F								F	0	$\frac{3}{2}$
Multiple offenders (prior		·											
violations)	L		L,F			L,F					L,F	4	3
Lower occupational level	L											1	0
Lower educational attainment	L									-		1	0
Single (fewer family													
responsibilities)	L										i	1	0
Fear of arrest	L											1	O
Non-wearers of safety belts		L,F	F	F		L						2	3
Value achievement and social status						- · · · · · · · · · · · · · · · · · · ·							
over social or religious													
concerns	${f L}$											1	0
Psychologically alienated	L							,,				1	0
Hostile	L											1	0
Tense	L											1	0
Depressed	L											1	0
Fatigued	L							· · · · · · · · · · · · · · · · · · ·				. 1	0
External locus of control	L		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·							1	0
Sensation-seeking	L				-						-	1	0
Closer followers (short headway)			L								L	2	0
Drivers of mid-size cars (1600-													
1900kg)			F									0	1 1
No passengers in vehicle			F							-	F	0	2
Newer cars			F			F					F	0	3
Drivers looking to the side			F									0	1
Highest speeds (e.g., 95%ile)						F		* * * ***				0	1
Bar patrons							F					0	1

- 10. Wagenaar et al. (1987) Comprehensive examination of Michigan drivers including observation and survey techniques
- 11. Wasielewski (1984) Comparison of driver records for belted and unbelted motorists

Many of the group descriptions shown in Tables 1 and 2 are defined uniquely within the particular study being referenced. Nevertheless, across the several studies, there is a pattern of some groups being consistently indicated as both high risk for crash involvement and less likely to wear belts.

One of these groups is young drivers and, in particular, young male drivers. A second group consists of those who choose to drink and drive. There is also an indication that individuals from lower socioeconomic levels are both at high risk for crash involvement and tend not to wear belts. This result is indicated directly in some studies and indirectly by findings that unbelted drivers tend to be in older, more dilapidated cars. The unbelted also tend to have less formal education and are more often unemployed.

There is also an association between poor prior driving records and failure to wear belts. Similarly, those individuals observed to engage in risky driving, such as running red lights, following closely or speeding, tend not to wear seat belts.

A general finding from the literature is that people who are less well adjusted, personally, are more likely to become involved in crashes. This result is generally reflected in those group definitions focusing on hostility, alienation and similar personality factors. It has also been found that people who engage in behaviors that involve personal health risks, such as smoking cigarettes, are also likely to take additional risks by not wearing a safety belt.

Obviously, the groups identified in prior literature (and the groups identified for this study) are not mutually exclusive. One individual could be an unemployed young male with little formal education who smokes cigarettes, chooses to drink and drive and has many prior crashes and violations on his driving record.

It should also be noted that little reference to the elderly may be found in prior belt use research. This is a group that tends to drive less than younger working age individuals but with a higher crash rate as calculated on a per mile basis (see e.g., Williams, 1985). Some evidence for lower belt use in this population may be found in Wasielewski (1983) and Preusser et al. (1988).

C. FARS

The second method for identifying target groups for this study was to examine the most recently available (1987) FARS data tape. The main advantage of FARS is that it covers all fatal crashes from all 50 states and the District of Columbia. The main disadvantage is that wearing a safety belt should limit the probability that a driver would be fatally injured. Thus, this data set says more about those drivers who do not wear belts than those drivers who do.

During 1987, there were 61,247 drivers involved in fatal crashes of which 26,831 actually died. The present analyses are based on the 61,247 involved drivers. The results showed substantial state to state variation in the percentage of these involved drivers who were wearing a "lap and shoulder"

belt just prior to the crash. The most readily apparent source of this variation was the presence or absence of a state law mandating belt use.

Table 3 shows "lap and shoulder" belt use indication from FARS for fatal crash involved drivers in the 50 states during 1987. The states are separated into those that had a belt law with a fine of at least \$15, those that had a law with a fine of less than \$15, those that had a law for only part of the year and those that did not have a law. Lap and shoulder belt use for the \$15 (or more) states averaged 32 percent as compared to only 13 percent in the non-law states. This is a striking difference. Clearly, any program implementation conducted as part of the present project had to be sensitive to the belt use law which prevailed in the jurisdiction involved in the implementation.

The FARS data (across all states) confirmed many of the primary groups suggested in the literature. Male drivers were wearing lap and shoulder belts at the rate of 19 percent as compared to 28 percent for females. Drivers coded as "alcohol yes" were wearing safety belts at the rate of only 9 percent as compared with 28 percent for "alcohol no." There were also substantial age differences. Drivers in the age range of 15-24 and 25-29 were wearing at the rate of 18 percent as compared to rates of 22 percent for 30 year olds, 25 percent for 40 year olds and 27 percent for 50 year olds. The rate for drivers ages 65 and older was 30 percent.

D. STATE CRASH DATA

The third method for identifying target groups was to examine state provided crash data. Crash data has the advantage of covering not just fatalities but all highway events, most of which result in property damage or in minor injury only. These data are limited by the fact that drivers may claim belt use to a police officer when in fact they were not wearing a belt at the time of the crash. This should be a particular problem in situations where there is a mandatory belt use law.

Data were available from the states of Michigan and Ohio for the years 1985 through 1987. Neither of these states had a mandatory belt use law in January of 1985. Michigan implemented a law in July of 1985, and Ohio followed in June of 1986. The data were provided from each of the states on several magnetic tapes. These data were processed to obtain one record for each driver involved in each crash. The resulting data set for analysis covered 2,012,276 driver records for Michigan and 2,042,037 driver records for Ohio. Any individual driver involved in two or more crashes during the 1985 to 1987 period would have generated two or more records. Similarly, a driver who was not involved in any crashes would not generate any records.

The data were analyzed with respect to the full range of available crash descriptors. However, only a few of these descriptors are relevant for the specification of target groups in the current study. Two of these, time and day of the crash, are shown on Table 4. The results in both states indicated that belt use (lap, shoulder or lap and shoulder) was lower at night, particularly late at night, and on weekends. These results are consistent with the finding that drinking drivers are less likely to buckle up.

Table 5 shows the distribution of driver age, driver sex and vehicle age by belt use. In both states, young drivers were less likely to buckle up than older drivers, and males were less likely to buckle up than females. Concerning vehicle age, both states show a substantial decline in belt use for drivers of older vehicles. The vehicle age results may be a reflection of belt systems generally getting better in terms of comfort and convenience in the newer models. However, it is presumed that drivers of the newer vehicles are more often from the higher socioeconomic strata, and drivers

Table 3.

Percent Lap and Shoulder Belt Use
Drivers Involved in Fatal Crashes

(FARS - 1987)

Mandatory Seat Belt Use Law in Effect for:

	All of	1987					
Fine \$1	.5-50	Fine \$0	-10	Part of	1987	None of 1	987
<u>State</u>		State	<u>&</u>	<u>State</u>		<u>State</u>	
						. **	24.5
CA	23%	ID	16%	CO	n.a.	AK	34%
CT	32%	IA	26%	IN	18%	AL	12%
FL	25%	KS	18%	OR	20%	AR	11%
HI	48%	MN	20%	WI	18%	AZ	6%
IL	n.a.	MO	23%	1.		DE	17%
LA	28%	TN	n.a.			GA	88
MD	38%	UT	16%	1		KY	10%
MI	n.a.			4		ME	n.a.
NJ	31%					MA	n.a.
NM	20%					MS	3ફ
NY	39%			-		MT	17%
NV	n.a.					NE	11%
NC	43%			*		NH	n.a.
ОН	30%					ND	48
OK	23%					PA	20%
TX	37%					RI	8%
WA	28%					SC	14%
****	200		-			SD	6%
						VT	25%
						VA	13%
						WV	12%
				:		WY	14%
				r.		WI	148
				•	—		
Average	32%		20%		19%		13%

Notes:

- 1. Data exclude "unknown" and "other"
- 2. Driver may or may not have been fatally injured
- 3 States shown as n.a. were judged to have too many "unknown" and "other" cases for analysis

Table 4. Percent Driver Belt Use by Time of Day and Day of Week Michigan and Ohio Crash Data 1985-1987

			•		
<u>Hour</u>	Michigan	<u>Ohio</u>	Day of Week	Michigan	<u>Ohio</u>
Ó	56%	35%	Sunday	64%	44%
1	53	33	Monday	68	49
2	51	31	Tuesday	68	50
3	51	31	Wednesday	69	50
4	56	36	Thursday	68	49
5	65	44	Friday	68	48
6	70	51	Saturday	. 65	44
7	72	54			
8	69	52			
9	69	50			
10	70	51			
11	70	51			
12	71	51			
13	70	50			•
14	69	50			
15	60	50			

N =	2,012,276	2,042,037	
Average	67	48	
23	59	38	
22	61	40	
21	64	43	
20	65	45	
19	67	48	
18	69	51	
17	71	53	
16	69	51	
15	69	50	
14	69	50	
13	70	50	
12	71	51	
11	70	51	
10	70	51	
9	69	50	
8	69	52	
7	72	54	
6	70	51	Saturday
5	65	44	Friday
4	56	36	Thursday
3	21	21	wednesday

Table 5.

Percent Driver Belt Use by Age, Sex and Vehicle Age

Michigan and Ohio Crash Data
1985-1987

Driver					
<u>Age</u>	<u>Michigan</u>	<u>Ohio</u>	<u>Vehicle Age</u>	<u>Michigan</u>	<u>Ohio</u>
16-19	70%	49%	1 year	£08	61%
20-24	70	50	2 years	78	60
25-29	72	54	3	79	62
30-39	74	57	4	77	59
40-49	76	57	5	74	54
50-64	76	58	6	72	51
65+	78	58	7	69	47
			8-10	68	46
	•		11+	60	39
			1	·	
Sex:		•			
Male	63%	52%			
Female	75	57	•		

of the older vehicles are from the lower strata. Thus, these results may also reflect socioeconomic differences in belt use.

The Michigan and Ohio data were also analyzed with respect to belt use before and belt use after the implementation of their respective mandatory belt use laws. In Michigan, these comparisons were made by comparing the first six months of 1985 (pre law) to the first six months of 1986 and the first six months of 1987 (post law). Reported belt use among crash involved drivers during Michigan's pre law period was 29 percent as compared to 74 percent in the post law period. In Ohio the comparison was between all of 1985 (pre law) versus all of 1987 (post law). Reported belt use in Ohio was 23 percent during 1985 versus 67 percent during 1987.

The results of these pre versus post law analyses showed very few differences in terms of target group specification. In other words, even though belt use reported in accidents had increased substantially in both states from the pre to the post periods, the non belt users in both states in both periods could be defined similarly. They were young males driving older vehicles late at night and on weekends. The one minor exception to this finding of similarity occurred with respect to the elderly. In both states, the group most likely to buckle up during the pre law period was in the age range from about 25 or 30 to 64 followed by those 65 and older followed by young drivers. However, during the post law period, the group most likely to buckle up in both states were those 65 years of age and older. These results suggest that the elderly were more likely to respond to the law than other age groups.

As mentioned above, the Michigan and Ohio data included several other crash descriptors which were judged not to be relevant for the purpose of target group specification. Those other descriptors, which were associated with lower belt use in both states, were as follows:

- dark (as opposed to daylight)
- snow and ice on the road
- inclement weather including snow, ice and rain
- greater injury severity
- more vehicle occupants
- multi-vehicle as opposed to single vehicle crashes (this and the vehicle occupant variable above may simply indicate that it is more difficult to claim belt use when there are more witnesses)

E. CDC SURVEY DATA

The Centers for Disease Control, working through state level personnel, administer an annual survey of health risk. Most, but not all, of the states participate in this effort and provide telephone survey data to the CDC for analysis. All of the data are collected using a standard Behavioral Risk Factor Surveillance System (BRFSS) telephone survey instrument. However, the interviewers and other administrative considerations vary from state to state. One of the questions on this survey deals with safety belt use and reads as follows:

How often do you use seat belts when you drive or ride in a car?

Would you say:

Always Nearly always Sometimes Seldom Never

Other questions on the survey cover a full range of personal descriptors and health related issues.

The most recently available CDC data tape for this project covered the survey year 1987. During this year, 33 states provided 50,077 completed questionnaires. Every participating state provided at least 1,000 completed questionnaires with the typical state providing approximately 1,100 to 1,300. One state, Minnesota, provided 3,235 and two states (Indiana and Tennessee) provided more than 2,000 each.

1. Crosstabulation

The first step in analyzing these data was to tabulate the responses to the belt use question by state and by the responses to all of the other questions that appeared relevant to the present project. The results showed that the response distributions for states and for most of these other questions were significantly related to responses on the belt use question. Across all of these comparisons, the largest differences were found with respect to state.

Table 6 shows the percentage of respondents who always wear their seat belt by state. The always category on belt use questions of this type has been shown to correlate highly with the observed belt use of individual drivers (see Wagenaar et al., 1987). The states in Table 6 are separated into: those that had a belt use law for all of 1987 with a fine of \$15-50; a belt use law with a fine of \$0-10; a law for part of 1987; and those with no law during that year. The results are similar to the results shown on Table 3 for the FARS data. Reported belt use in the law states was approximately double the reported belt use in the non-law states.

Table 7 shows the results by respondent sex for young people (ages 18-24) and older people (ages 25+). These data clearly show that young males are the least likely to respond that they always wear a seat belt. It can also be seen that young people in general (i.e., of both sexes) are less likely to respond always and that males in general (i.e., both young and older) are less likely to respond always.

Table 8 shows the results for always wear a seat belt as a function of several survey items related to health risk. The results show a general pattern of correlation between failure to wear a seat belt and other risks. Only 33 percent of those people who are at risk for "acute drinking" (five or more drinks on one occasion during the preceding four weeks) reported that they always wear a seat belt as compared with 45 percent of those who are not at risk for acute drinking. Similar results may be seen for the risks of drinking and driving, smoking cigarettes, overweight and whether or not the individual had a flu shot within the past 12 months. It was also found that those people who had ever been told that they had high blood pressure were slightly less likely to report that they always wear a seat belt.

Table 6.

Percent Always Buckle Up
by Belt Use Law

CDC Survey '87

Mandatory Seat Belt Use Law in Effect for:

	All o	f 1987						
Fine	\$15-50	Fine	\$0-10	Part	of 1987	None of	E 1987	
<u>State</u>	- ₹	<u>State</u>		<u>State</u>		<u>State</u>	- 8	_
CA	64%	ID	34%	IN	37€	AL	. 27%	
DC	69%	MN	42%	WI	27€	AZ	41%	
FL	67%	MO	41%			GA	33%	*
HI	76%	TN	46%			KY	28%	
IL	45%	UT	37€			ME	31%	
MD	63%					MA	37€	
NM	71%					MT	26%	*
NY	60%					NE	30%	
NC	70%					NH	34%	
OH	56%					ND	16%	
TX	68%					RI	38%	
WA	61%					SC	31%	
						SD	13%	
						WV	26%	*
								
	64%		40%		32%		29%	

*Law effective in 1988

Table 7.

Percent Belt Use by Age and Sex

CDC Survey '87

25+ Years 18-24 Years Wear a <u>Male</u> <u>Female</u> <u>Both</u> <u>Both</u> Seat Belt <u>Male</u> <u>Female</u> 19,613 Always 860 1,335 2,195 7,501 12,112 43€ 39% 41% 47% 448 34% 7,821 1,005 3,249 4,572 427 578 Nearly Always 17% 19₹ 18% 18€ 18% 18% 459 530 989 2,849 3,747 6,596 Sometimes 15% 17% 15€ 14% 18% 18% 1,960 4,215 Seldom 331 285 616 2,255 13% 98 11% 11% 9ક 98 3,028 5,800 444 347 791 2,772 Never 18% 11% 14% 15% 12% 13% 5 4 9 136 291 427 Other* 1₹ 1% 1₹ 2,526 3,079 5,605 18,467 26,005 44,472 Total

100%

100%

100%

100%

100%

100%

^{*}Don't know, refused, never ride in a car

Table 8.

Percent Always Buckle Up by Health Risk Factors

CDC Survey '87

	Yes or at Risk	No or <u>Not at Risk</u>
At risk for:		
Acute drinking	33%	45%
Drinking and driving	26%	44%
Smoking	35%	46%
Overweight	37%	45%
<pre>Flu (i.e., did not get flu shot)</pre>	43%	49%
Ever had high blood pressure	41%	44%

Table 9 shows the results for always wear a seat belt as a function of education, employment and marital status. Concerning education, there was a steady increase in the percentage of respondents who reported always wearing a seat belt with increasing levels of formal educational attainment. Only 35 percent of those individuals who had not completed high school reported always wearing their belts as compared with 56 percent for those who had completed college and 59 percent for those with at least some graduate training. Concerning employment, individuals who were "out of work" were least likely to respond that they always wear their belts. Reported belt use also varied as a function of marital status though the variation was less than that found with respect to education and employment. The group least likely to respond always were those individuals who were divorced.

Tables 7, 8 and 9 show belt use across all of the states participating in this survey. However, as shown in Table 6, belt use varied substantially as a function of whether or not an individual state did or did not have a belt use law. Therefore, all of these tabulations were run again separately for those states with a \$15-50 law, those states with a \$0-10 law and those states with no law during 1987. With one exception, all of the results reported above were seen in each of these separate tabulations. In other words, there was little evidence for interactions among any of the effects reported above and the presence or absence of a mandatory belt use law. For instance, males had the lowest self-reported belt use rates in the \$15-50 states and in the \$0-10 states and in the no law states even though "low" belt use in the \$15-50 states was approximately double "low" belt use in the no law states. This finding of little or no interaction between the law and no law condition (but with a large main effect) is generally consistent with the findings reported by Wagenaar et al. (1987) and Preusser et al. (1988) comparing drivers before and after the implementation of mandatory belt use legislation in Michigan and New York respectively.

The one exception to the "no interaction" finding occurred with respect to persons ages 65 and older. In the states without a law, 28 percent of persons ages 65 and older responded that they always wear their seat belts. This compares with 34 percent for persons ages 25-34 and 30 percent for all ages. In the \$15-50 law states, 68 percent of persons ages 65 and older responded that they always wear belts as compared with 64 percent for all ages. Thus, persons ages 65 and older showed a 40 percentage point gain from the no law to the \$15-50 law condition. The gains for other age groups ranged from 29 points for 18-24 year olds to 39 points for 55-64 year olds.

These results indicate that older persons may or may not buckle up in the absence of a belt use law but will buckle up when such a law is implemented. One possible explanation for these findings is that most older persons learned to drive in non belt-equipped vehicles. They developed non belt use habits over many years and did not change these habits in response to voluntary buckle up efforts. However, they do respect the law and will buckle up once a mandatory law is implemented.

2. Linear Model

All of the above analysis were based on crosstabulations of reported belt use by the other available variables. These other variables were considered one at a time or, at most, two at a time. The next analysis step was to incorporate all of the variables into a single analysis to determine the relative strength of the variables in predicting belt use and to examine the cross correlations between the variables. The selected technique was the General Linear Modeling (GLM) procedure of SAS (SAS Institute, Inc., 1982). The dependent variable for this procedure was reported belt use on a five point scale with 1 = always and 5 = never. The independent or predictor

Table 9. :

Percent Always Buckle Up by Demographic Factors

CDC Survey '87

	Not <u>HS Grad</u>	HS <u>Grad</u>	Some <u>College</u>	College <u>Grad</u>	Post <u>Grad</u>	
Educational Level	35%	38%	47%	56%	59%	
	Employed	Self <u>Employed</u>	Out of <u>Work</u>	Home- maker	Student	Retired
Employment Status	45%	37%	36%	46%	45%	44%
	Married	Divorced	<u>Separated</u>	<u>Widowed</u>	Never <u>Married</u>	
Marital Status	44%	<u>21701ceu</u> 418	44%	<u>wrdowed</u> 42%	43%	

variables are shown on Table 10 and cover all of the variables discussed above (age, sex, risk of acute drinking, risk of overweight, etc.).

Summary statistics for the GLM model are shown in Table 10. These results indicate that the strongest predictor of belt use, by far, was the presence or absence of a belt use law followed by formal educational attainment. Other important predictors were risk of smoking (i.e., currently smokes cigarettes), had a flu shot within the past twelve months, risk of acute drinking and risk of overweight.

Notably absent as a significant predictor was respondent age (taken as a continuous variable ranging from young to old). This variable was significant when taken by itself in the modeling procedure. In other words, respondent age is related to belt use. However, the results shown on Table 10 indicate only that portion of the belt use variance which is "best" predicted by each of the predictor variables. Knowing a respondent's educational status, employment status, marital status, risk of acute drinking and status with respect to all of the other variables in the model left an insufficient amount of variance that could best be predicted by age. Also, as shown above with respect to "belt law" and below with respect to other variables, age interacts with other variables to create discontinuous results across the categories of these other variables.

The overall model shown in Table 10 was used to suggest target groups for the current project. In general, the procedure was to suggest a group that: 1) did not use safety belts; and 2) could possibly be identified from the general population for the purpose of delivering some yet to be developed buckle up program. Then, for each identified group, the GLM procedure was re-run adding several interaction terms involving the primary group descriptor. These interaction terms would help to understand the group and identify any special characteristics that needed to be considered.

One possible candidate group was persons who were at risk because they are overweight. Subsequent analysis showed an interaction between "risk of being overweight" and "trying to lose weight." This interaction indicated that the primary group was not simply people who were at risk for being overweight, but people who were both at risk and were not trying to lose weight. While it would be relatively easy to identify overweight people who are trying to lose weight (e.g., weight control clinics), it would be much more difficult to identify overweight people who are not. Therefore, "overweight" was dropped as a candidate target group.

A second possible candidate group was the unemployed. Significant interactions involving "employment status" and belt law, educational attainment and sex were seen. The interaction with belt law indicated that retired people in the non-law states did not buckle up, which is consistent with the discussion of the 65+ age group above. The interaction with education indicated that increasing education had its greatest positive effect on belt use for the employed, self-employed and homemakers as opposed to those who were out of work or retired. The interaction with sex indicated that those least likely to buckle up were non-working males including male "homemakers," the unemployed and students.

Another possible group was persons who smoke cigarettes. Significant interactions involving age and belt law were seen. The interaction with age indicated that smoking was disproportionately more often associated with less reported belt use for younger persons. Concerning belt law, there was a slight tendency for smokers to buckle up disproportionately less often in the non-law states.

Table 10.

Belt Use Model

CDC Survey '87

<u>Variable</u>	d.f.	F Value	<u>Probability</u>
Age	1	1.8	.18
Education	1	1,650.4	*
Acute Drinking	2	150.3	*
Overweight	2	100.0	*
Smoking	2	256.3	*
Blood Pressure	5	3.3	*
Sex	1	55.7	*
Employment	7	2.7	*
Flu Shot	1	166.6	*
Marital Status	6	27.2	*
Race	4	26.7	*
Belt Law	2	2,743.8	*
Age x Sex	1	3.4	. 07
Age x Employment	. 7	2.2	.04
B	·		•••
Model Total	42	266.8	*

 $R^2 = .19$

* p < .01

Persons at risk for acute drinking represent another possible target group for this effort. Here, significant interactions were found with respect to age and education. The results showed that those drinkers who reported less belt use were disproportionately more often young with less formal education.

As indicated above, age was a critical factor in many of the analyses. Older persons reported high belt use in response to a law yet low belt use when no law had been implemented in their state. Young persons have generally low belt use particularly when they also smoke cigarettes or consume alcohol. It was also found that young persons are less likely to wear belts if they are out of work (as opposed to, for instance, being a student) or if they are separated or never married.

F. GROUP SPECIFICATION

The five target groups recommended for the development of buckle up programs were introduced at the beginning of this Section. Each of these groups has been referenced in the literature as being at a high risk for crash involvement or less likely to wear belts or both. Each has also been identified in one or more of the data sets analyzed as part of this study.

The five groups are not, and were never intended to be, mutually exclusive. An unemployed young male who dropped out of high school, drinks alcohol and smokes cigarettes could fit four of the five groups identified. However, this individual would be selected from the population and be given a very different buckle up program depending on which strategy and communication channel was being used (i.e., which group was being tested). Further, other individuals grouped with this hypothetical young man would be quite different depending on the group specification. For instance, at one time this individual might be grouped with other drinkers of both sexes, at another time he could be grouped with other smokers of both sexes and varying ages and at still another time he could be grouped with other unemployed males of any age.

Each of the groups were also selected on the basis of their ability to supply an observable distinguishing characteristic upon which they could be readily identified from among the general population. Temporary characteristics such as fatigue or tension were dismissed out of hand. More generic personality characteristics such as hostility and alienation were also dismissed as requiring psychological screening prior to group selection. Characteristics which required documentation or surveys such as multiple traffic offenders or high annual driving mileage were also rejected.

Young males ages 18-24 were the first and perhaps most generic group selected. As a group, these people have some of the worst driving records and have been shown not to buckle up both in the literature and in every data set analyzed as part of this project. To the extent possible, the data suggest a focus on those young males who are unmarried, have less formal education and lower socioeconomic status. Each of these additional characteristics are indicated in the CDC data as contributing to lower belt use and each has been shown in the literature to be related to higher crash risk.

Drinkers are the second identified group. These individuals are clearly at a higher risk for crash involvement and are identified in the literature and every data set analyzed as less likely to wear belts. To the extent possible, the analyses suggest a focus on those drinkers who are younger, have less formal education and lower socioeconomic status. While this analysis resulted in a group which is predominately male, no indication was found in the data which would necessarily exclude females.

Elderly (ages 65+) in the non-belt law states are the third identified group. In general, the elderly are not a high crash risk group when considered on a per driver basis. However, the elderly drive fewer miles per year on average and thus on a per mile basis they are high risk. The literature, the Michigan and Ohio data and the CDC data all indicate that this group does not buckle up in the absence of a legal requirement.

Unemployed males are the fourth identified group. The primary evidence for this group comes from the CDC survey showing lower reported belt use among unemployed males (but not females). Unemployment is often associated with lower socioeconomic status and less formal education which is thought to be generally associated with the driving of older vehicles. All of these other related factors are indicated as contributing to either lower belt use or higher crash risk or both.

Smokers of both sexes are the last identified group. Again, the primary evidence for this group comes from the CDC data showing that people who smoke cigarettes report less belt use. This is particularly true for young people who, presumably, started smoking after the dangers of smoking were well known. In other words, this is a group of people who take health risks and presumably engage in other risky behaviors such as risky driving. Hunter et al. (1988) showed that smokers were less likely to be observed wearing a safety belt. There is also a small tendency in the Hunter data for smokers to have inferior driving records.

The next Section of this report covers a review of previous campaigns designed to increase belt use. Following that, communication approaches that could be used to reach these groups are addressed.

III. PHASE I: REVIEW OF PREVIOUS COMMUNICATION EFFORTS

In order to have the potential to alter the safety belt use habits of the five target groups described in the previous Section, it is necessary to define effective communication programs. These must be capable of both reaching the target audience and providing the necessary information or motivation to alter behavior. In the context of the current effort, two methods were used to identify and evaluate candidate communication program approaches. The first was an extensive review of pertinent literature. This review encompassed both previous safety belt efforts and other analogous campaigns aimed at possible target groups. The second method was an analytical assessment of available communication methods to obtain a theoretical view of their capability to support the alteration of safety belt use by the defined high risk groups.

A. LITERATURE SEARCH OBJECTIVES

A computerized literature search was conducted utilizing the Dialog data bases maintained by Lockheed's Palo Alto Research Library. In addition, a manual search was conducted of a limited number of professional journals related to the subject area. The primary objective of this literature search was to identify recent studies that have been successful in motivating drivers and producing behavioral changes in safety belt use. Particular attention was devoted to uncovering programs that were successful in promoting safety belt use among members of the candidate target groups.

B. SEARCH STRATEGY

The databases used in this search were selected based on past experience in conducting computerized literature searches in the areas of interest to this study. A brief description of each of these databases follows:

- National Technical Information System (NTIS) NTIS is maintained by the National Technical Information Service of the U. S. Department of Commerce. It is the central source for the public sale and dissemination of U.S. Government-sponsored research, development and engineering reports as well as analyses prepared by government agencies, their contractors or grantees. The file includes information from 1964 to present.
- Transportation Research Information Service (TRIS) The TRIS database is supplied by the Transportation Research Board under contract to the U.S. Department of Transportation. The records are either abstracts of documents and data holdings or resumes of research projects that are relevant to the planning, development, operation and performance of transportation systems and their components. Highway Research Information Service (HRIS) from 1968 to the present is included in this database.
- PTS Marketing and Advertising Reference Service (MARS) PTS MARS abstracts information on the advertising and marketing of consumer goods and services appearing in more than 70 key source publications including Journal of Advertising Research, Advertising Age and Marketing and Media Decisions.

- Educational Resources Information Center (ERIC) ERIC is a complete database of educational materials and consists of two subfiles: Resources in Education and Current Index to Journals in Education. The database includes file data from 1966 to present.
- Psychological Abstracts Information Service (PSYCINFO) Formerly Psychological Abstracts, this database covers the world's literature in psychology and related disciplines in the behavioral sciences. More than 1300 journals, technical reports, monographic series and dissertations are covered each year to provide coverage of original research, reviews, conferences, panels and case studies.

In addition to the above, manual searches were conducted of the *Human Factors Journal* and the *Journal of Consumer Research*.

C. RESULTS

A large number of titles were identified and reviewed and abstracts were printed of those which appeared relevant to the project. It was determined from a review of the abstracts that approximately 40 of these references merited a more detailed examination, and these documents were obtained. These documents are listed in a bibliography appended to this report. The vast majority of the work described, with the notable exception of an enforcement and public education campaign in Elmira, New York (Williams, et al., 1987), was conducted prior to the adoption of mandatory occupant restraint use laws.

A number of studies indicated that safety belt use can be increased by offering incentives to non-users to buckle up. A six month campaign to increase safety belt use in two communities in North Carolina centered around the idea of giving economic incentives to safety belt wearers. (Campbell, et al., 1984). The approach was to stop vehicles at random and give all belted vehicle occupants a small prize and a chance for a large cash prize. Support was sought from community leaders and incentives were obtained from a number of businesses. Public information and education activities began three weeks prior to the incentive phase of the program and continued throughout the program. Public service television and radio spots as well as printed advertisements publicized the campaign. Baseline data indicated a use rate of 24 percent. Belt use grew steadily throughout the incentive phase and peaked at 41 percent during the last week of the campaign. Follow-up data collection two months after the incentive phase showed that use had declined to 36 percent.

Incentives were also used successfully to increase safety belt use on a university campus. (Geller, et al., 1987.) Faculty/staff and students who signed and returned "buckle up" pledge cards had the opportunity to win prizes donated by community businesses. Part of the card was designed to be displayed on the rear view mirror of a vehicle as a reminder. Faculty/staff safety belt use increased from a Spring baseline rate of 36 percent to a Spring follow-up rate of 46.7 percent one year later. Students increased use from a pre-program rate of 25.3 percent to a follow-up rate one year later of 36.6 percent.

A similar approach was recently used by Nimmer and Geller (in press) at a community hospital. Employees who signed and displayed pledge cards and wore belts were eligible for small weekly prizes. Overall belt use increased from a two week baseline mean of 15.6 percent to 34.7 percent during the six month intervention and decreased to 25.6 percent at withdrawal.

Geller (1982) developed a manual designed to teach the corporate executive successful strategies for implementing and evaluating a successfully industry-based program to motivate employee safety belt use. Geller states that voluntary behavior requires both direction and motivation in order for it to occur and a campaign to increase safety belt use must include strategies for motivating behavior. The recommended strategies include making safety belt use convenient and comfortable, reminders to buckle up when entering a vehicle, rewards for wearing a safety belt, disincentives for non-use (e.g., fines), obtaining verbal or written commitment to wear safety belts and providing a modeling situation (putting on a belt in view of another person who does not usually wear one).

A nationwide survey provided some information on demographic, situational and motivational factors affecting safety belt use (Mayas, et al., 1983). The survey was conducted by telephone but also included information from face-to-face interviews and belt use observations. The study indicated that there are four major motivational factors affecting safety belt use. These factors are: comfort ratings of the restraint system, convenience ratings, influence ratings of potential safety message sources, and the willingness to equate safety belt use with other good health practices. It was noted that individuals who are concerned about personal health are more likely to wear belts. Respondents recommended the use of pictures accompanied by statistics to show what can happen when safety belts are used. Discomfort and inconvenience should be downplayed as insignificant compared to safety advantages. It was suggested that messages should emphasize what belts do and not what they cannot do in the case of an accident. Also there is a need to dispel the myth that safety belts are dangerous because they trap passengers.

The fear of entrapment was the most frequently stated reason for not wearing safety belts in a survey of Michigan licensed drivers (O'Day and Filkins, 1983). An analysis of the Fatal Accident Reporting System (FARS), the National Crash Severity Study (NCSS) and the National Accident Sampling System (NASS), was used to explore the incidence of death from automobile fires and immersions and the relationship between belt usage and such deaths. The study provides data which indicate that deaths from fire or immersion accidents are rare among traffic fatalities and that the likelihood of losing consciousness and thus the capability of self-rescue is approximately doubled when restraints are not used. The study also suggests that the virtue of being thrown clear of the vehicle is a myth and that the likelihood of death is more than seven times as great if one is ejected than if one remains in the car.

A study was conducted to assess the possibility of using insurance incentives to increase safety belt use (Coonley and Gurvitz, 1983). It was concluded that the best prospect for insurance incentives to influence safety belt usage lies with efforts by employers to achieve insurance benefits by promoting strong employer safety belt efforts. It was thought unlikely that any insurance company will offer substantial incentives to drivers who wear safety belts for lack of methods to substantiate the driver claim of safety belt use.

In a discussion of risk in adult and teen safety belt use, Donahue (1988) suggests that selling belts on their intrinsic merit is preferable to selling them because "it's the law." Risk appears to play an important role in the decisions made by both adults and young drivers about belts, although adults are much more concerned about risk than young drivers. Perceptions of risk related to driving appear to function as one among many important variables affecting belt use. Young drivers appear to be influenced by their beliefs of the belt's ability to do its job rather than the fact that belt use is mandated by law. The author feels that belts must be sold on the intrinsic properties of the belts

themselves, i.e., comfort, convenience and effectiveness in keeping them out of life-threatening situations.

Green and Sharpe (1982) discussed increasing recognition in courts that failure to wear belts constitutes contributory negligence and that perhaps tort laws should do what they can to increase safety belt use.

Fhaner and Hane (1975) examined the relations between beliefs and the use of safety belts in automobiles. In earlier studies they had demonstrated that certain beliefs were highly correlated with attitudes toward safety belt usage. Two beliefs, measured in terms of factor scores, displayed a high correlation with safety belt usage when combined in a multiple regression equation. These beliefs concerned discomfort and constraint when wearing belts and the injury-reducing effects of belts in case of accident. These two factors were manipulated experimentally in an industry-based program and the effect on belt use was examined. Four treatments were assigned to six groups: verbal information, nonverbal practice on safety belt use, verbal information irrelevant to safety belts and no treatment. Of the four, verbal information on safety belt use had the most favorable impact on post test beliefs and displayed the greatest increase in safety belt use, although the effects generally decreased over time.

Geller (1985) developed a community-based strategy for promoting safety belt use, and it was field-tested in two adjacent communities. The intervention involved the front-seat passenger of a stopped vehicle displaying to the driver of an adjacent stopped vehicle, a flash card that read, PLEASE BUCKLE UP. Of the unbuckled drivers shown the flash card, 82 percent looked at the card and 22 percent complied with the request. A higher success rate was achieved in the town which had a large college community than in the adjacent rural community.

Another university-based incentive program to increase safety belt use was conducted by Rudd and Geller during 1983-1984. The strategy utilized was similar to previous efforts in that incentives were given for safety belt use. Although it was felt that the increase in safety belt usage was disappointing, results indicated that incentives can increase usage. It was suggested that follow-up studies should assess the impact of this approach and perhaps combine it with a safety belt mandate. The authors noted that perhaps the most positive outcome of the effort was that, towards the end, the study was managed almost entirely by the college police and two student organizations. Further, these groups were planning to continue the program into the following academic year.

A safety belt education program successfully increased safety belt use in a public health setting (Saunders and Pine, 1986). The intervention consisted of a 10 minute safety belt education presentation to low-income mothers participating in a Women, Infants and Children (WIC) program. The presentation included discussion of accident statistics and a viewing of a three minute simulated crash film. The concepts of good parenting, role modeling, and protecting oneself from an intoxicated driver, etc., were discussed. Observational data showed an increase in belt use from 4.9 percent to 12.6 percent. This result was considered encouraging considering the brevity of the intervention and the nature of the study population. The low baseline safety belt use rate of 4.9 percent is consistent with other studies that have shown that low income, poorly educated people and single individuals tend to wear safety belts less often that the general population. It was concluded that group education can be an effective strategy to encourage safety belt use and that such education can be efficiently incorporated into existing public health programs. However, it was suggested that education by itself is less effective than using a combination of approaches. It was felt that other methods of raising safety belt use such as incentive programs and mandatory safety

belt policies and legislation, in addition to education programs, will most likely achieve the greatest public health impact.

Sleet (1984) reports that health promotion approaches found effective in reducing morbidity and mortality from chronic diseases are being applied to reducing death and disability from motor vehicle trauma. The use of safety belts is of recognized benefit in reducing the public health problem associated with traffic crashes. However, the author states that, in the final analysis, the full potential for health promotion strategies to increase safety belt and child restraint use will rely on active and voluntary participation by individuals who value their own health. Immediate and continuous effort must be directed to motivate people to use belts as a means of increasing health and well-being.

Waller, et al. (1984) conducted a study to examine the effect of safety belt messages on observed belt use. Questionnaires covering attitudes and behavior in relation to various health practices were administered to 248 subjects. Messages were presented at a second meeting with the same individuals and were repeated on the telephone at a later date. Belt observations were made at a third meeting. Overall, no observable effects were seen on safety belt use. The conclusion was that brief messages on the effects of safety belt use and risk of motor vehicle injury combined with follow up messages, do not lead to increased use. There were no significant differences in use as a function of age, race or sex. These results are contrary to the findings of the majority of studies examined and may be attributable to the populations studied or the dilution of the safety belt message among the other health practice information.

Thyer and Geller (1987) reported on a program that doubled the use of safety belts by front seat passengers. A vehicle dashboard sticker that read SAFETY BELT USE REQUIRED IN THIS VEHICLE, was installed in the cars of 24 graduate students who always buckled up when driving. The graduate students were trained in observational and data collection methods, and the study relied upon their reported data. The mean baseline belt use of 476 passengers was 34 percent. Subsequently, buckle up stickers were placed in the 24 vehicles, and passenger belt use increased to 70 percent (N = 448). Two weeks later, the stickers were withdrawn and passenger belt use dropped to 41 percent (N = 406). Replacement of the 24 stickers for two final weeks resulted in 78 percent belt use by 392 front seat passengers. Although long-term effects could not be determined, it was felt that simple environmental intervention could be readily integrated with other behavior change approaches to safety belt promotion.

Finn, et al. (1985) conducted a study which included a test of the effectiveness of three treatments to motivate belt use among young drivers. The rationale for this work was based on the belief that young drivers are willing to take risks and are therefore resistant to motivations to buckle up. Risk taking ratings were obtained from 122 male and female subjects between the ages of 18 and 24. The subjects then viewed a baseline driving situation on videotape. This situation was subsequently compared in riskiness to other scenes of actual driving. The subjects then drove a four mile course and rated its risk level. A questionnaire was used to collect personal data and driving history. The subjects were then randomly assigned to three treatment groups based on the type of safety belt promotional presentation made: 1) a pamphlet; 2) a film; and 3) a simulated safety belt law which advised the subjects that they would be fined five dollars if they did not buckle up. Over half of the male drivers and one third of the female drivers fit the profile of a risk taker. Subjects with less education tended to be both risk takers and non-users of safety belts. Subjects who normally used safety belts perceived somewhat lower risks than subjects who never wore belts. Female drivers perceived greater risks and perceived them more accurately than male drivers.

Results showed that there was a significant increase in use of 21 percentage points among those exposed to the pamphlet. Use of the film resulted in no significant change, but the law simulation achieved a significant increase of 40 percent. After a four week period, there was a decrease of nine percentage points among those exposed to the pamphlet (not statistically significant). There was still no change in those who saw the film. The law simulation group actually showed an increase in use during the post observation, although the change was not statistically significant.

The Finn, et al. (1985) work suggests that it may not be effective to increase young drivers' perception of specific driving hazards because the presentation of hazard information was not associated with an increased rate of safety belt use. Rather, attention should be given to risk-taking attitudes and practices since there appears to be a definable risk taker profile. The work also suggests that legislation accompanied by fine and a high perceived risk of law enforcement would be the most effective approach to increase safety belt use by young drivers.

McKnight (1982) developed four approaches to be used in driver education programs to promote safety belt use. These approaches included: 1) information only; 2) audio-visual testimonials by peer members; 3) experience in vehicle; 4) The Convincer deceleration sled. It was concluded that all four approaches had beneficial effects. The information, testimonial and vehicle programs produced significant gains in knowledge about and attitudes toward use of restraints. It was not determined for how long these gains would be sustained. Although the vehicle program appeared to produce the most substantial gains, the authors cautioned that the results may have been an indication that the students in the vehicle program were a more responsive group. The effectiveness of The Convincer was discouraging as it failed to obtain any significant gains. The failure was accounted for in part by the inability of the information component of the program to communicate effectively and large day-to-day variation in prevailing restraint use.

McKnight (1982) concluded that it is possible to influence students in the use of safety belts by means of an in-school program. Communication of factual information and the risks associated with failure are a necessary element of the program, and more research is needed to determine whether any additional benefit is derived from experiencing the consequences of non-use through operation of a vehicle, a ride in *The Convincer*, or the testimony of someone who has been injured in a crash.

McNabb and Dueker (1982) developed a pilot program to persuade automobile dealers and salespeople to promote safety belts at the point-of-sale. Conferences were held and key messages included the theme that encouraging the use of safety belts shows concern for the customer's well-being. This concern can translate into an increase in referrals and improvement in business. This program was well received by dealers and salespeople. Salespeople did discuss safety belts with some of their customers and some customers reported an increase in safety belt usage. It was concluded that safety belt usage can be encouraged by a number of different groups and that automobile dealer safety belt programs could be a successful channel in this regard.

Enforcement of safety belt laws, combined with a publicity campaign, has been shown to be very successful in increasing safety belt use. Williams, et al., (1987), conducted a three week enforcement and publicity program in Elmira, New York. Glens Falls, New York served as a control city. Elmira residents received notification prior to the implementation of the study that a special program to enforce the safety belt law was about to commence. Public service and paid time slots on the radio and TV were used to convey the messages. Residents were told that warnings would be given to non-safety belt users during a specific week and that tickets would be written thereafter.

During a one week warning period, police presented over 500 warning notices to motorists at highly visible sites in the downtown area. During the following two weeks, 189 tickets were issued for violations of the safety belt law. The publicity campaign was maintained throughout the period. Baseline data indicated safety belt use in Elmira was 49 percent and in Glens Falls 42 percent. At the end of the warning period, Elmira safety belt use had risen to 63 percent; the following week, at the end of the ticketing period, use was 77 percent. Two weeks later there was a reduction in use rate to 69 percent, although the use rate was still 20 points higher than before the program. Glens Falls, in contrast, remained about the same (42-43 percent) throughout the interval. Although there was some fall off in belt use in Elmira some two months later, safety belt use was also declining in other cities in New York. During this period, the range of use was from 37 to 46 percent in eight of the nine surveyed cities in New York, whereas Elmira's safety belt use was 66 percent.

A Canadian study (Jonah, et al., 1982) had similar success in an enforcement/publicity safety belt campaign. In this study, three approaches were used to promote safety belt use. A cooperative public education program was conducted by the Federal government in ten provinces. The program consisted of public service announcements through mass media, lectures, pamphlets, posters, etc. Measures of attitudes toward and self-reported use of safety belts before and after the campaign revealed no impact on attitudes and behaviors.

A second approach was a Selective Traffic Enforcement Program (STEP) in which increased enforcement of safety belt laws was combined with public education activities promoting use. The STEP approach was first implemented in 1979, and it had considerable success in increasing safety belt use. However, some two years later use had declined from the high of 80 percent achieved at that time to 66 percent. Therefore, the STEP program was replicated in 1981 and was successful in producing an increase in safety belt use from 66 percent to 76 percent.

A later study was conducted to evaluate the long-term effectiveness of the STEP programs (Jonah and Grant, 1983). The research questions were: 1) Will safety belt use two years after a STEP be above the pre-STEP level? 2) Will repeated STEPs be as effective as an initial STEP in increasing belt use? 3) Are shorter STEPs (e.g., two days, one week) as effective as longer STEPs (e.g., one month)? 4) Do STEPs increase safety belt use for all drivers regardless of place of residence, age and sex? 5) Does the increase in safety belt use induced by STEPs result in reduction of motor vehicle casualties? A series of six safety belt use surveys was conducted at a site where three STEPs were conducted during a 12 month period. These surveys indicated that the five research questions should be answered in the affirmative. Safety belt use increased from 66 percent before the first STEP to 84 percent after the third STEP. Periodic STEPs are a feasible and cost-effective method of promoting 80 percent safety belt use rate levels.

The primary focus of this literature search was motivational techniques and communication channels which have been successful in encouraging safety belt use. However, during this search three studies emerged which discussed communication techniques and addressed some aspects of directing messages to high crash-risk and groups who do not use safety belts. The following paragraphs summarize these additional findings.

CM3 Associates (1987) in a review of the safety belt literature, divides the target audience into two subdivisions for different messages: teenage males and adult males. They also identify secondary (support) groups to be targeted: female friends and spouses of the male target groups, other friends and family members. Finally, they recommend preventive communications programs for younger teenagers. The techniques recommended or endorsed by CM3 Associates are as follows:

- Appeal to values and attitudes of the groups
- Avoid scare tactics, preaching or giving orders
- Avoid terminology that will generate defensiveness/denial
- Stimulate audience interaction
- Provide practical information
- Demonstrate short (not long) term outcomes
- Provide practical countermeasures
- Avoid celebrity endorsements, particularly from professions associated with alcohol/drug use
- Incorporate appropriate role model with whom to identify
- Incorporate approaches similar to those used in beer/alcohol advertising
- Be clear, simple, reality-based and truthful
- Suggest that people think about their behavior rather than telling them what to do
- Create associations between "the product" and the hopes, fears and beliefs of the target viewers
- Give clear, simple, specific messages
- Integrate evaluation research

The CM3 report makes media-related comments and recommendations as follows:

- No one medium appears inherently "better" than the others, although TV and radio are often more effective than print media
- Coordinate multiple components in any program: media, promotion, distribution, training, implementation
- Include reinforcement and interpersonal communications, materials, information, counseling, school programs, active law enforcement
- Coordinate efforts of the different organizations to avoid inadvertently fragmenting and hurting all of the efforts.

Hunter et al. of the University of North Carolina (1988) address the communications issues through different motivations associated with subgroups. They note that the plurality of non-graduates of high school wear safety belts in order "to avoid the fine," and do not wear them for

"fear of being trapped." The plurality of drivers with two or more prior violations also wear safety belts in order "to avoid the fine." On the other hand, the plurality of college graduates wear belts for "safety" and do not wear them because they "forget." In general, situations that would prompt safety belt use are bad weather, having children in the car, being on a long trip, getting a reduction in insurance premium rates, being threatened with fines or points on their driving record, making the belts more comfortable and easier to use, having a ticket history for non-use of belts, and receiving safety belt "salutes" from officers. Spokespersons favored by respondents in this study include TV or movie celebrities (e.g., Bill Cosby, Barbara Mandrell) and racing car drivers. The most remembered advertisement is by NHTSA depicting the crash dummies, Vince and Larry. The best target groups identified in this study are those with two or more prior violations and non-graduates of high school.

Wagenaar et al. of the University of Michigan (1987) reviewed communications recommendations made in a range of studies and suggest the following:

- Use prompts along the road and at places serving alcohol
- Increase driver knowledge of crash involvements (e.g., through media news reports)
- Market safety belt use as part of a larger, "total health" program
- Mandate safety belt use by effective laws, including punishment by fines
- Provide publicity and education about positive enforcement of the safety belt use laws
- Conduct employer-based promotions
- Conduct community-wide promotions.

The review of previous communication efforts uncovered a wide range of approaches ranging from traditional mass media efforts to highly localized and interactive appeals and inducements. No specific previous communication efforts were identified for any of the high risk groups of interest to the present effort. This is not surprising given the relatively narrow definitions of these groups. However, there are significant insights which can be drawn from the previous programs to aid in the analysis of communication programs for the five target groups. This analysis will be addressed in the next Section of this report.

IV. PHASE I: ANALYSIS OF COMMUNICATION APPROACHES

The literature discussed in Section III identified many communication programs which have been used with varying degrees of success to promote the use of occupant restraints. Although the studies reviewed did address safety belt use directly, most were not focused on particular target groups. Rather, they dealt with the general driving and motoring population. Since the present effort is concentrated on narrowly defined, high risk populations, additional insights on communication approaches were sought.

The additional input desired was obtained from two separate sources. First, a search was made of the general advertising literature to see what programs and strategies have been used successfully to "sell" any product or concept to the target groups of interest. Although no single model effort or approach was found in the advertising literature which was directly applicable to the five groups of interest, numerous insights were obtained which assisted in the analysis of alternative approaches.

The second source of input was the previous experience of the project staff in designing and implementing campaigns to reduce pedestrian and bicycle accidents, promote the use of safety belts and prevent the abuse of alcohol and drugs. As part of these previous efforts (e.g., Blomberg and Preusser, 1974b), extensive reviews of all relevant media channels were undertaken and a model of the process of communications as a countermeasure was developed. This model and direct experience evaluating safety communications led to the specification of guidelines for public education programs and strategies which have been widely promulgated and have proved successful in promoting safety (e.g., Blomberg and Preusser, 1974a and Blomberg, et al., 1983).

The result of the literature review and these additional efforts is an enumeration of candidate communication program components and strategies which is presented below. Before addressing specific approaches, however, it is important to specify the terminology which will be employed in describing the composition of a program.

A. COMMUNICATION PROGRAMS AND THEIR COMPONENTS

The ultimate product of the present study will be one or more programs which are effective in getting high risk drivers to buckle up. In the context of this effort, a program may be thought of as a system for achieving the desired behavioral change, i.e., increased occupant restraint use, by interacting with a defined population (the "target group") according to a specified plan. The components of this plan are:

- A setting The locus of the interaction with the target group, i.e., where will the target group be and what will they be doing when the program interacts with them;
- A medium The particular form of the interaction with the target group. The medium may be thought of as the vehicle through which the message is presented to the target group in the defined setting. The most familiar media are TV spots, films and videos, radio transcriptions and print;
- A message The specific information conveyed through the medium in the setting to the target group. A message consists of a content which specifies the information to

be presented; a motivation which deals with a particular target group need or desire which will make them attend to the message; and a presentation which specifies the creative aspects of the presentation including precise wording.

A program strategy is the choice and manipulation of the various program components to maximize the likelihood of achieving the desired outcome. For most communication programs, the chief strategic issues involve the choice of program components and the timing of presentations. A program is defined by specifying the setting or settings through which it will operate and the strategy for employing the setting in terms of choice of media and design of the message.

1. Settings

Settings may be characterized as "generic" or "specific." Generic settings are those which are routinely used to convey information and to influence attitudes and behavior both for safety and for marketing. They are associated with limited media forms. That is, once you select a generic setting, the basic media form(s) of any materials to be distributed as part of the strategy is highly constrained. Generic settings include:

- Television TV is often called the "great persuader" because of the potentially powerful message which can be presented in the combined audio/video medium. This power, however, comes at relatively high expense. TV production costs are typically quite significant. Air time is also expensive if purchased or of uncertain frequency and timing if acquired through public service advertising (PSA) donations. TV has been shown to be extremely effective in safety programs when used in coordination with other, more specifically targeted channels. TV requires a visual medium, either a spot announcement or a show.
- Radio Radio is less expensive to develop and access than TV, but lacks the impact of a visual message. For safety belt promotion, it has the distinct potential of being timely because of the extent of radio listening by vehicle occupants. As with TV, radio has been used in effective multi-channel programs. The spot announcement, either live or pre-recorded, is the primary radio medium.
- Periodicals Newspapers and magazines have proved to be effective channels in multi-channel programs. Their available media are advertisements, news or editorial reporting. The biggest shortcoming of periodicals in the context of the present study is that they typically have their greatest impact among more highly educated people and those in high socioeconomic strata. These individuals are generally not in high risk groups vis-a-vis safety belt use.
- Legislation Federal, state and local laws, ordinances and regulations are a
 potentially viable generic setting for promoting safety-related behaviors.
 Mandatory safety belt use laws have demonstrated the potential effectiveness
 of this approach.
- Direct Mail Most Americans receive mail at their residence or place of work thereby creating a viable communication setting. Direct mail can be

relatively expensive if used independently or quite inexpensive if the communication is included as part of routine mailings, e.g., inserts with car registration renewals. The credibility of direct mail varies greatly as a function of its source. It can be highly targeted if the address data base contains appropriate descriptive information.

• Engineering - The design and construction of roads, facilities and products is not often thought of as a "communication" channel. However, numerous studies have shown that designs have the capacity to induce or inhibit behaviors.

Specific settings cover the range of all possible situations in which interaction with target group members is possible. They can be categorized along several dimensions such as the site or context of the interaction. For the purposes of the present study, applicable specific settings include:

- The Workplace Places of employment are typically characterized by one or more homogeneous groups of people who congregate at the same site on a regular basis. This supports repeatable, targeted and potentially timely and cost-efficient communications. The choice of workplace can be used to target specific socioeconomic, age or education level groups.
- Schools and Colleges Schools and colleges are an analog to the workplace but only for specific populations. The type of educational setting, e.g., trade or vocational schools versus college preparatory, can assist somewhat in targeting.
- Health Care Settings People of all types may be found at various types of health facilities including hospitals (inpatient and outpatient), clinics and the offices of private physicians. These settings can often be well targeted, are highly credible and are relatively unclogged with competing messages. Timeliness may also be excellent for a buckle up presentation. Repeatability, however, cannot often be achieved.
- Personal Encounter A variety of encounters with credible individuals can be employed as an effective communication setting. The use of auto salesman described in Section III (McNabb and Dueker, 1982) or the widespread use of police officers to visit schools and clubs are examples of personal encounters. If a target group gathers and if a credible source exists for that target group, the personal encounter can be highly cost-efficient, particularly if the spokesperson is a volunteer. The personal encounter has been shown to be an especially effective channel when a demonstration is required to insure understanding of a concept or procedure. A variant of the personal encounter can be conducted by telephone. This is often done in the form of a survey, but any one-on-one telephone discussion would be considered part of this setting.
- Personal Experience Some people will only learn or alter their attitudes and beliefs based on their own experiences. For these people, an actual episode,

either with or without an associated personal encounter, can be highly effective. The Safety Belt Convincer deceleration sled is one specific example of this type of approach. The extensive use of free samples in marketing consumer goods is another.

- Legal/Administrative Settings Groups of people typically pass through a variety of legal or administrative settings including courts at all levels, mandated driver retraining courses and activities such as license renewal, tax payments and unemployment collection. The people at these sites are often quite heterogeneous with respect to the broad range of socioeconomic measures. They are by definition, however, completely homogeneous with respect to the compelling reason for their presence, e.g., all have received traffic tickets, all are unemployed, all are property owners.
- Permanent Social Sites People congregate in a variety of continuing or permanent social settings. These include specialized places of residence, e.g., retirement homes, clubs and service organizations of all types and religious groups. These populations are typically quite homogeneous which can assist targeting. They can be addressed repeatedly with messages in a relatively uncompetitive environment.
- Transient Social Sites Many other groups come together on a transient basis for a particular social or religious reason. These settings include sports events, rallies, retail establishments and meetings of all types. Because of the very nature of these settings, repeatability is difficult or impossible and narrow targeting is very difficult. However, timing which is close to the safety belt use decision is possible, and many of these events support large sample sizes thereby making personal encounters or other presentations highly cost-efficient.

The literature and previous experience suggests certain setting characteristics which are likely to yield an effective buckle up program for high risk groups. These are:

- Targeted The setting should have the capability of addressing the target audience directly without wasting a great deal of effort convincing the audience that the message is directed to them.
- Credible The setting should be credible to the target group as a source of the type of information being presented.
- Timely The setting should be capable of addressing the target group as close to the point of the behavior in question as possible.
- Repeatable The capability should exist for multiple exposures through the setting (either with single or multi-media presentations) in order to promote and maintain the desired effect.
- Unclogged Most viable settings for buckle up messages are already being widely used for general advertising and/or safety. The extent to which this

competition will interfere with the execution of an adopted strategy is an important characteristic of a good setting.

• Cost-efficient - The use of a setting typically involves development costs and may also have associated access costs, e.g., for time or space. The more desirable settings are those that reach a maximum number of the target audience per unit of cost. They are making the most efficient use of the setting-related expenditures.

2. Strategies

Strategies involve the choice of setting, medium and message and the way in which they are manipulated to accomplish the communication objectives. As mentioned above, the choice of setting will often dictate or at least limit some of the strategic options. The major strategic dimensions which are relevant to promoting safety belt use are:

- Form of Presentation Certain settings permit latitude in the form of the presentation made to the target audience while others do not. For example, a radio message is, by definition, an audio presentation. The only flexibility available in designing a radio program would involve creative choices such as the use of music or the type of voice to employ. Personal encounters, on the other hand, can typically involve most any format including speeches, audiovisual presentations and the use of printed handouts.
- Type of Information There are basically two types of information which are applicable to programs of this type. Simplistically, they may be viewed as "new" data and reminders. New data or information are presented with the intent of increasing knowledge and awareness and thereby altering beliefs and behavior. Reminders have the objective of reactivating knowledge which is known (or presumed to be known) with the primary objective of bringing it to bear on decision-making at a critical point. The reminder is characteristically simpler than a new information presentation because it can be more synoptic and rely on the audience member to "fill in the blanks." It must also be noted that information as used in this context is not limited to statistics or pronouncements of law. An emotional appeal by a celebrity or accident victim is "new" information because the target audience is presumably not aware of the spokesperson's involvement with the subject matter.
- Timing The temporal relationship of the presentation to the desired behavior and the planned number of repeated exposures are the major aspects of timing. Point of behavior messages are often quite effective in producing immediate behavioral changes. Communications delivered at "quiet" times of limited or nonexistent competition will typically be well attended to by the target audience. Repetition (up to the point of annoyance) is usually associated with greater changes in knowledge and behavior than single exposures.

- Motivational Approach Perhaps no part of program strategy is more controversial than the choice of motivational approach. The literature is replete with conflicting findings concerning the success of employing various motivational approaches. The preponderance of evidence, however, points to the fact that any of the following motivational approaches can be effective if used appropriately:
 - Creating fear or personal concerns
 - Dispelling fears or personal concerns
 - Life style perception, e.g., appearing affluent or intelligent
 - Self image, e.g., as law-abiding, healthy
 - Incentives (economic, status or convenience)
 - Disincentives (loss of privilege, legal consequences, economics, ridicule or peer pressure).

3. Programs

The overall purpose of the present study was to design and test programs to promote the use of safety belts by high risk drivers. Each program to be considered had to consist of one or more settings and associated strategies. For example, a program directed at the elderly might be set in retirement communities and employ personal encounters with local police as well as films and posters to motivate the residents to be law abiding and buckle up. The strategy might include several repeated personal encounters supplemented by the print and audiovisual materials.

The assessment of the feasibility of a particular program in the context of this study was the ability to postulate one or more approaches which had face validity, were consistent with previous research and were economically and logistically viable. This was done by proposing programs for each of the five target groups enumerated in Section II. These programs were not necessarily synonymous with the test scenarios developed for Phase II of the present effort. Limitations on time and resources dictated that those tests employ surrogate "scenarios" intended to provide insights on the performance of the full-scale program.

B. POSSIBLE PROGRAM APPROACHES

The final step in the first Phase of the present effort was to enumerate possible communication program approaches to increasing safety belt use among the selected target groups. This enumeration had at least two distinct purposes. First, it provided an indication of whether the overall approach of addressing high risk groups could be translated into potentially viable programs. Second, it was a major input into the process of selecting from among the identified high risk groups the particular one which became the focus of the Phase II evaluation program.

The five groups which were candidates for program development were:

- 18-24 year old males (particularly unmarried with lower socioeconomic status and lower educational attainment)
- Drinkers (younger, with lower socioeconomic status and lower educational attainment)
- Elderly in non mandatory belt use states
- Unemployed males (with lower socioeconomic status)
- Smokers (younger).

As indicated by the literature review, none of these groups were addressed in sufficient detail by previous buckle up efforts to provide a definitive indication of feasibility. Therefore, the best available measure of potential program feasibility was considered to be the ability to specify one or more apparently viable settings and strategies which could be used to influence safety belt use.

Insights from the literature review as well as the direct experience of the project staff were input to an analysis of potential program approaches. This analysis did not consider the ability of the resulting program to be evaluated. In fact, a major distinction between the programs specified to determine feasibility and those proposed for testing in Phase II was whether or not their outcomes could be measured in a realistic and feasible evaluation. In order to be included in a Phase II test, there had to be an ability to make a reasonable determination of which of the test subjects exposed to a program are members of the various target groups and their specific response to the program. In general use, however, it may be necessary or at least more cost effective to expose a wide range of people to the communication program in order to insure that the desired target audience is reached. For example, few TV programs (except a small number of weekend public affairs efforts) are directed specifically at the elderly. However, various viewer surveys can be used to indicate which general audience shows have a significant elderly audience. These could be used as a setting for spot announcements. However, they could not have been used as part of the Phase II evaluation because a determination of which elderly people had been exposed to the program and the subsequent behavioral response would be well beyond the scope of the present effort.

The results of the enumeration of program components for each of the target groups are presented in Tables 11-15. These Tables show possible settings and associated media information types, motivational approaches, timing and distribution considerations. The appearance of any entry on a row in these Tables indicates a potentially feasible program approach using the distribution mechanisms indicated in the final column. Conversely, a blank row represents a judgment that a particular setting not feasible for that target group.

Even a quick glance at the tables is sufficient to indicate that the analysis showed more than one feasible program approach for each group. However, each potential program combination was not considered to be equally effective or cost effective. The target group of drinkers, for example, may be relatively more difficult to address than any of the other groups. This group is not anyone who drinks but, rather, people who drink to excess. In one respect, they are easy to target with communications because they congregate at drinking establishments and at places where alcohol is sold. However, people with an alcohol problem tend to deny that the problem exists. Further,

Table 11.

Possible Approaches for Young Males Ages 18-24

SETTING	Medium	Type of Information	Motivation	Timing	Distribution	
			Self Image;	Repeat in		
TV	Spot Announcements	Reminder	Life Style	Special Programs	Mass Media	
	Spot Announcements;	New &	Incentive;	Repeat During	Mass Media &	
Radio	Contest with Grand Prize	Reminder	Self Image	Drive Time/Night	Retail	
		New &	Dispel Concerns;		Normal	
Periodicals	Advertisements	Reminder	Self Image/Style	As Available	Circulation	
	Special Sanctions		Incentive/		As Passed +	
Legislation Special Offenses		New	Disincentive	N/A	Publicity	
	License/Registration	New &	Incentive/		Normal	
Direct Mail	Renewals	Reminder	Disincentive	As Applicable	Mailings	
	Safety Belt Interlock				Condition of	
Engineering Systems		Reminder	Disincentive	As Applicable	Probation	
	Posters; Contests;		Incentive/	Repetitive but	Safety Groups;	
Workplace	Rewards	Reminder	Disincentive	Changing in Form	Publishers	
	Posters; Contests;		Incentive/	Repetitive but	Vocational	
Schools	Rewards	Reminder	<u>Disincentive</u>	Changing in Form	Schools	
<u>Health Care</u>		· · · · · · · · · · · · · · · · · · ·				
Personal					.•	
Encounter						
					Sporting	
Personal	"Convincers"	New	Create Concern	As Available	Events;	
Experience					Parking Lots	
	Posters; Pamphlets;	New &	Incentive/	Constant	DMVs; Social	
Legal Setting	s Video	Reminder	Disincentive	Availability	Agencies	
Permanent Social Sites						
	Billboards; Toll Tickets;		Self Image;		Public Agencies;	
	Pamphlets; Bumper Stickers;	New &	Life Style;	As Available	Safety Groups;	
Transient	ramphiets; bumper stickers;	IAEM OX	Dire Style;	ve vagitable	Service Groups,	

Table 12.

Possible Approaches for Drinkers

SETTING	Medium	Type of	Motivation	Timing	Distribution
		Information			
	•	New &	Concerns;	Repeat; Couple	
TV	Spot Announcements	Reminder	Life Style	With Drink Ads	Mass Media
		New &	Concerns;	Repeat During	
Radio	Spot Announcements	<u>Reminder</u>	Life Style	Morning	Mass Media
		New &	Concerns;	As Available &	Normal
Periodicals	Advertisements	Reminder	Self Image/Style	Drink Ads	Circulation
	Special Sanctions		Incentive/		As Passed +
<u>Legislation</u>	Special Offenses	New	Disincentive	N/A	Publicity
	License/Registration	New &	Incentive/		Normal
Direct Mail	Renewals	Reminder	Disincentive	As Applicable	Mailings
	Safety Belt & Alcohol				Condition of
Engineering	Interlock Systems	Reminder	Disincentive	As Applicable	Probation
	Posters; Pamphlets;		Life Style;	As Drinking	Health Workers;
Workplace	Counseling	Reminder	Concerns	Problem is Known	Prof. Counselors
	Posters; Pamphlets;		Life Style;	As Drinking	Colleges & Voca-
Schools	Counseling	Reminder	Concerns	Problem is Known	tional Schools
	Encounter; Posters;	New &	Life Style;	Waiting Rooms or	Medical Assns;
Health Care	Pamphlets; Video	<u>Reminder</u>	Concerns	by Professional	Drug Companies
			Concerns;		NHTSA; Beverage
Personal	Pamphlets; Posters;	New &	Life Style;	During Normal	Industry; Safety
Encounter	Script	Reminder	3rd Party Liability	Drinking	& Service Groups
				···	Sporting
Personal	"Convincers"	New	Create Concern	As Available	Events;
Experience					Parking Lots
	Posters; Pamphlets;	New &	Incentive/	Constant	DMVs; Social
Legal Settings	Video	Reminder	Disincentive	Availability	Agencies
	Posters; Pamphlets;		Life Style;	Constantly	NHTSA; Beverage
Permanent	Video; Scripts;	New &	Self Image; Create/	Availabe for use	Industry; Safety
Social Sites	Speakers	reminder	Dispel Concern		& Service Groups
	Posters; Pamphlets;		Life Style;	Constantly Ready	
Transient	Video; Scripts;	New &	Self Image; Create/	for Use	Industry; Safety
Social Sites	Speakers	reminder	Dispel Concern	as Time Permits	

Table 13.

Possible Approaches for the Elderly (65+)

SETTING		Type of	Motivation	Timing	Distribution
		nformation	·		
		New &	Dispel Concerns;	Repeat in	
TV	Spot Announcements	Reminder	Self Image/Style	Special Programs	Mass Media
		New &	Dispel Concerns;	Repeat in	
Radio	Spot Announcements	Reminder	Self Image/Style	Special Programs	Mass Media
	Articles &	New &	Dispel Concerns;		Elderly-Oriented
Periodicals	Advertisements	Reminder	Self Image/Style	As Available	Circulation
<u>Legislation</u>					
	License/Registration	New &	Dispel Concerns;		Normal
Direct Mail	Renewals: Health Promos	Reminder	Self Image/Style	As Applicable	Mailings
	Safety Belt Comfort/				Safety & Service
Engineering	Convenience Aids	New	Dispel Concerns	As Applicable	Groups; Retail
	Posters; Pamphlets;	New &	Incentive (as		Safety & Service
Workplace	Talks	Reminder	_Intermediary)	As Applicable_	Grps.;Publishers
	Posters; Pamphlets;	New &	Incentive (as		Safety & Service
Schools	Talks	Reminder	Intermediary)	As Applicable	Grps.; Publishers
-	Encounter; Scripts; Posters;	New &	Life Style;	Waiting Rooms or	Medical Assns;
Health Care	Pamphlets; Video	Reminder	Dispel Concerns	by Professional	Drug Companies
	Film/Video; Pamphlets;				Safety & Service
Personal	Script; Posters;		Life Style;		Groups; Police;
Encounter	"Simulators"	New	Dispel Concerns	As Applicable	Car Dealers
					Religious Events
Personal	"Simulators"	New	Dispel Concerns	As Available	Retirement Homes
Experience			•		Shopping Centers
	Posters; Pamphlets;	New &	Dispel Concerns;		DMVs; Social
Legal Settings	Video; "Simulators"	Reminder	Self Image	As Available	Security Offices
			Dispel Concerns;		Retirement Homes
Permanent	Posters; Pamphlets; Video;	New &	Self Image/Style;		Social Clubs;
Social Sites	Scripts; "Simulators"	Reminder	Disincentives	As Applicable	Service Clubs
	Billboards; Toll Tickets;				Public Agencies;
Transient	Pamphlets; Add-On Print;	New &	Life Style;	As Available	Safety Groups;
Social Sites	Posters: Video	Reminder	Dispel Concerns		Service Grouns
occidi pices	I OUTCED. ATMED	1,-ill 11/4-2	TTO CT CONCELIE		

Table 14

Possible Approaches for Unemployed Males

SETTING	Medium	Type of Information	Motivation	Timing	Distribution
			Self Image;	Repeat in	
TV	Spot Announcements	Reminder	Life Style	Special Programs	Mass Media
			Disincentive;	Repeat During	
Radio	Spot Announcements	Reminder	Self Image	Drive Time/Night	Mass Media
		New &	Dispel Concerns;	As Available &	Normal
Periodicals	Advertisements	Reminder	Self Image/Style	Classified	Circulation
	Special Sanctions		Incentive/	•	As Passed +
Legislation	Special Offenses	New	<u>Disincentive</u>	N/A	Publicity
	License/Registration	New &	Incentive/		Normal
Direct Mail	Renewals	Reminder	Disincentive	As Applicable	Mailings
	Safety Belt Interlock				Condition of
Engineering	Systems	Reminder	Disincentive	As Applicable	Probation
Workplace Schools	Posters; Contests; Rewards	Reminder	Incentive/ Disincentive	Repetitive but Changing in Form	Vocational Schools
Health Care Personal					. •
Encounter			•		
Personal Experience	"Convincers"	New	Create Concern	As Available	Sporting Events; Parking Lots
	Posters; Pamphlets;	New &	Incentive/	Constant	Unemployment
Legal Settings	Video	Reminder	Disincentive	Availability	Offices
Permanent Social Sites				·	
	Billboards; Toll Tickets;		Self Image;		Public Agencies
Transient	Pamphlets; Add-On Print;	New &	Life Style;	As Available	Safety Groups;
Social Sites	Posters: Video	Reminder	Incentives		Service Groups

Table 15
Possible Approaches for Smokers

SETTING	Medium	Type of Information	Motivation	Timing	Distribution
		New &	Concerns;	Repeat; Couple	
TV	Spot Announcements	Reminder	Life Style	With Smoke Ads	Mass Media
		New &	Concerns;	Repeat During	
Radio	Spot Announcements	Reminder	Life Style	Morning	Mass Media
		New &	Concerns;	As Available &	Normal
Periodicals	Advertisements	Reminder	Self Image/Style	Smoke Ads	Circulation
	Special Sanctions		Incentive/		As Passed +
Legislation	Special Offenses	New	Disincentive	N/A	Publicity
	License/Registration	New &	Incentive/		Normal
Direct Mail	Renewals	<u> Reminder</u>	Disincentive	As Applicable	Mailings
	Safety Belt Interlock				Condition of
Engineering	Systems	Reminder	Disincentive	As Applicable	Probation
	Posters; Pamphlets;		Life Style;	As Smoking	Health Workers;
Workplace	Counseling	Reminder	Concerns	Problem is Known	Prof. Counselors
	Posters; Pamphlets;		Life Style;	As Smoking	Colleges & Voca-
Schools	Counseling	Reminder	Concerns	Problem is Known	tional Schools
	Encounter; Posters;	New &	Life Style;	Waiting Rooms or	Medical Assns;
Health Care	Pamphlets; Video	Reminder	Concerns	by Professional	Drug Companies
			Concerns;	At Time of	NHTSA; Tobacco
Personal	Pamphlets; Posters;	New &	Life Style;	Purchase of	Industry; Safety
Encounter	Script	Reminder	Self Image	Smoking Material	& Service Groups
					Sporting
Personal	"Convincers"	New	Create Concern	As Available	Events;
Experience					Parking Lots
	Posters; Pamphlets;	New &	Incentive/	Constant	DMVs; Social
Legal Setting	sVideo	Reminder	Disincentive	Availability	Agencies
	Posters; Pamphlets;		Life Style;	Constantly	NHTSA; Beverage
Permanent	Video; Scripts;	New &	Self Image; Create/	Availabe for use	Industry; Safety
Social Sites	Speakers	reminder	Dispel Concern	as Time Permits	& Service Groups
	Posters; Pamphlets;		Life Style;	Constantly Ready	NHTSA; Tobacco
Transient	Video; Scripts;	New &	Self Image; Create/	for Use; Stop	Industry; Safety
Social Sites	S-eakers	reminder	Dis-el Concern	Smokin Pro rams	& Service Grou s

members of this group may be under the influence of alcohol at the time they are exposed to communication programs, e.g., at a bar. This raises the question (not yet answered in the literature) of the ability to alter the behavior of someone who is under the influence at the time of intervention. It also suggests that the use of intermediaries needs to be carefully considered for this group.

The target group of young males presents a unique challenge because of the multiple characteristics (age, socioeconomics and lifestyle) used to define the group. Since these youth do not typically congregate in well defined locations, more innovative program approaches will be required to reach them.

The remaining three groups, elderly, smokers and the unemployed, are relatively easy to target using multiple settings and media. The reasons why the elderly do not buckle up are quite well documented and include a lack of knowledge concerning the correct method for wearing safety belts and potential physical problems with the act of putting on a restraint. Smokers are clearly health risk takers. Their willingness to continue smoking even in the face of the extensive and widely published evidence of its health effects suggests that they may be equally resistant to buckle up messages. The unemployed likely perceive more pressing problems than the need to wear a safety belt. Of all the groups, they may be the one most susceptible to a simple reminder approach.

The analysis just presented has indicated that it is feasible to develop buckle up programs for all of the identified driver groups. Some of these programs would be more practical or cost efficient than others, but all could conceivably be developed. The possible programs will also vary on the basis of their effectiveness. From the literature, it may be seen that previous buckle up efforts have produced increases in belt use ranging from zero to 30, 40 and even 50 percentage points. Lower figures are more often associated with voluntary or informational approaches, moderate figures with incentive type efforts and higher figures with legal interventions or direct personal appeals.

In general, the literature does not directly cover buckle up programs for the specifically defined target groups identified in this study (though several previous efforts have successfully dealt with similar groups). Nevertheless, there is one overall finding from the literature, and from the analyses conducted as part of this study, which is directly relevant. Namely, there is little evidence (the response of the elderly to safety belt use laws excepted) for an interaction between a buckle up effort and the types or groups of drivers that respond to that effort.

In Elmira, for instance, observed belt use was lower for men, younger people and those on the road late at night. This was true during the baseline observations when belt use was approximately 49 percent. It was also true following an enforcement and publicity program that increased belt use to 77 percent. However, there were no significant interactions for baseline versus post observations by sex, age or time of day (Williams et al., 1987). Similar non interactive results were reported for Michigan comparing those that buckled up both before and after Michigan's mandatory law, and similar results are reported in Section II of this report comparing crash and survey data for the belt law and no belt law condition.

These findings suggest that buckle up efforts can be effective for most population groups. Some groups start at lower belt use before the effort begins and remain at lower belt use after the effort has been implemented. However, "lower" belt use following a successful buckle up effort can be very much higher than the "lower" belt use observed before the effort began. This higher "lower" belt use can represent a substantial gain in reduced death and injury if it involves individuals who are more likely to be involved in a crash.

V. PHASE II: PROGRAM SELECTION

A. OVERVIEW

The initiation of the second phase of this study was contingent upon a "positive" conclusion from Phase I. This means that the first phase had to show that communication programs to affect belt use in one or more of the target groups were feasible. As reported in the previous Section, the Phase I results supported such a conclusion because numerous face valid programs were identified. The initiation of Phase II was therefore authorized by NHTSA.

At the conclusion of Phase I, a scenario for mounting and testing a program was outlined for each of the five groups. These scenarios were one of the important bases used in the ultimate selection of the target group for testing. Since each scenario outline identified the major features of appropriate programs as well as measures and methods of evaluation, they were also intended as guidance for the implementation of the second phase. All five scenario outlines are presented in Appendix A. These provide useful information for any future program developers contemplating dealing with these groups.

Contractor and NHTSA personnel reviewed the Phase I results thoroughly and selected young males as the target group. The age range 18-24 was selected as the primary target and 25-35, as the secondary. This group was selected from among the five candidate groups largely because young males are at a higher risk for crash involvement than all other demographically-defined groups of drivers. Further, young males have been consistently shown to have a lower belt use rate than other drivers and have been highly resistant to countermeasures programs. Clearly then, a program that would increase belt use for this group has a large potential for reducing crash injury as well as providing a wealth of methodological information with respect to reaching difficult high risk groups. The outline for the young male target group identified radio as the most appropriate communication channel and a radio game with significant prizes and bumper stickers as the specific medium. These media forms were selected largely because they had been used successfully in previous, similar programs by the cooperating radio station (see *C. Program Development* below).

Phase II was initiated, then, with young males as the target group according to the developed scenario outline. The first activities were to select candidate sites for the test of the program and to develop the program in detail. The Phase II effort was based on using a radio contest designed for young people because young males tend to listen frequently, especially when driving. Also, because radio stations target specific audiences with some high precision (by the type of music and format they use), it is relatively easy to select an appropriate station for a young male audience. To provide an effective research vehicle, the station had to be one with a defined, non-overlapping, market serving a small to mid-sized area (i.e., a population of 100,000 people which will include 6-8,000 males in the 16-24 age group).

B. SITE SELECTION

Several criteria were used in selecting the test site. A market size of 100,000 was a requirement in order to have the potential to reach 6-8,000 young males in the 16-24 age group. The radio station selected to implement the scenario had to have a substantial market share of the target group in its service area, with clear, powerful coverage. Preliminary screening was done using standard, industry reference sources including Condensed Radio Market Reports from the Arbitron

Company rating service. This is a special market-by-market analysis to which many stations subscribe in order to document the extent and nature of their audience. Not all markets of the target size are covered by Arbitron reports. However, a sufficiently large number were available to enable the project to have a choice among several alternative regions of the country and metropolitan areas.

From the available data, WKMX, an FM station serving the Enterprise/Dothan/Ozark, Alabama area, appeared to best meet all of the criteria. That is, its format is targeted at a youth market, particularly males; its listening audience is large; and it attracts an overwhelming majority of the young males in its area (see below). It was arranged to have persons in the area listen to that station to obtain a sample listing of advertisers and get further, more up-to-date information as to type of music and format. The only apparent drawback to the use of WKMX was that it is located in a state (Alabama) which does not have a mandatory safety belt law. However, the region it covers is quite heavily influenced by the presence of Fort Rucker, and safety belt use is mandatory on base. Further, a set of observations of seat belt use was conducted by the project and estimated that the overall use rate was 37.3 percent, which is consistent with the use rates achieved in many locations with mandatory use laws. Therefore, it was concluded that WKMX was a good choice and, with NHTSA concurrence, WKMX was approached with the idea of implementing the program.

The Arbitron Company prepares a periodic report on the Dothan, Alabama radio market (Arbitron, 1989). It provides the following data on the market and the position of WKMX:

- WKMX is an FM station broadcasting 100,000 watts at 106.7 MHz. It is located in Enterprise, Alabama, and also serves the neighboring cities of Dothan and Ozark.
- The metropolitan ("metro") Enterprise/Dothan/Ozark area served by WKMX includes 106,600 people of whom 20,500 (19.2%) are males between the ages of 18 and 34. What Arbitron calls its "Total Survey Area" (TSA) which is approximately equivalent to the total listening area for WKMX, includes 332,800 people and 54,900 (16.5%) males aged 18 to 34. The higher proportion of young males in the metro area compared with the TSA is likely due to the presence of Fort Rucker.
- WKMX has by far the largest share of the desired target audience. Arbitron measures audience share by "Ratings" and "Share" values measured in quarter hour samples. The Rating is the estimated percentage of all possible audience members of a particular type, e.g., males 18-34, in the geographic area. The Share is the percentage of the estimated listening audience a particular station commands. WKMX has a share of the male 18-34 audience which is consistently more than double its nearest competitor. This Share peaks at 51.4 percent for the weekday, morning (6AM to 10AM) hours. For total "Drive Time" (commuting hours), WKMX has a 43.6 percent Share while its nearest competitor has only a 12.8 percent Share.

In addition to its strong penetration of the desired target audience of young males, WKMX utilizes contests extensively as part of its normal promotional activities. It is also an extremely civic-minded station and has devoted many contests and promotions to charitable and public service causes. It therefore appeared to be an ideal setting for the test program. When approached, the management of the station wholeheartedly agreed to participate.

C. PROGRAM DEVELOPMENT

The development of the program to communicate with the young male target group was actually initiated in Phase I during the review and evaluation of candidate media for the identified high risk groups. Based on the media evaluation for young male drivers, a scenario calling for use of a radio contest was developed. The underlying theory was that safety alone would likely not be a sufficient motivation to get the young male to buckle up. However, if the behavior could be initiated based on other motivations, i.e., the desire to win a prize, some proportion of the target audience might emerge from the test as regular seat belt users.

The basic approach of a radio contest in which listeners can win a prize by exhibiting a specific behavior was not original to this project. Other radio stations have utilized this approach as a self-promotion and as part of product advertising. In fact, WKMX had previously used a similar approach to promote various local events. They had not, however, ever attempted it with a specific safety-related behavioral objective. Prizes given in various WKMX contests in the year before the test program was initiated ranged from t-shirts to new cars and a motor home.

The premise of the proposed contest was that listeners would be encouraged to sign a pledge that they would use their seat belts. In return for the signed pledge, they would receive a brightly colored "bumper" sticker (which was actually recommended for rear window installation). During the contest, observers at random locations and times would note the license plates of cars bearing the bumper sticker and announce them on the air. If the driver of the car heard his or her license listed and went to the station within a specified time, he/she would win \$106.70 and be entered in a grand prize drawing for \$1006.70.

The plan for implementing the contest was agreed upon in a series of meetings with the management of WKMX during late 1989. The actual contest ran during February and March of 1990 with the grand prize drawing held on April 7, 1990 (postponed from March 24, 1990 due to flooding in the region). Responsibility for the program was divided between WKMX and Dunlap and Associates, Inc. as follows:

- WKMX was the nominal sponsor of the program. The contest was identified as a WKMX contest and messages promoting it as well as the timing and operation of the giveaway were prepared by the station. WKMX also recruited cooperating merchants and prepared public service announcements (PSAs) promoting seat belt use based on the theme that "seat belts keep you in control" which NHTSA desired to associate with the program.
- Dunlap was the producer and, as such, responsible for the generation of the print components of the contest, all program support and the program evaluation.

The program was identified by the logo Make It Click!. Its objectives were to: 1) increase safety belt use among the target group (16-24 year old males) in the Enterprise/Dothan/Ozark area; 2) increase general awareness of the benefits of safety belt use among all residents of the same area; 3) to develop, evaluate and document a program that can be adapted easily and widely by other radio stations which target young males; and 4) to learn as much as possible about the general process of targeting high risk groups.

Prior to any broadcast of messages or of the contest (January, 1990), a series of observations were made to establish a "baseline" for belt use in what is referred to as the pre-contest (or simply "pre") period. The contest itself was preceded by several weeks of introductory or "teaser" messages about an impending opportunity to win money. Safety belts were not specifically mentioned, but, after the initial messages, the *Make It Click!* sound effects were played. The contest itself required that participants go to a McDonald's fast food outlet and complete and sign a pledge form, shown in Figure 1, on which they agreed to fasten safety belts whenever they drove. These "pledges" were deposited in a box for a subsequent secondary prize drawing for a t-shirt with the *Make It Click!* logo. A window/bumper sticker was also given to the participant.

Possible winners were selected using a systematic, random plan of observation developed by the project and implemented by WKMX employees. They recorded the state and license plate number of the first two vehicles that met the eligibility requirements:

The Make It Click! window/bumper sticker was displayed

and

• The driver was correctly wearing a shoulder belt.

The two observed registration plates were then announced throughout the next day. This was accompanied by a buckle up message and instructions to appear at WKMX to redeem a daily prize of \$106.70. Each of the 40 daily winners was then registered for the drawing of the grand prize of \$1,006.70. In addition to the public service announcements using the "seat belts keep you in control" theme and extensive use of the *Make It Click!* slogan, all of the radio personalities ("disk jockeys") on the station "buckled in" when they came on the air and "buckled out" when their program was completed. Sound effects of a seat belt buckling and unbuckling were used extensively. Over one million milk cartons incorporating the logo were distributed in the WKMX listening area.

The Make It Click! logo developed for the program is shown as used in the window/bumper sticker in Figure 2. The reverse side of this sticker was printed with the contest rules. This illustration was also used in display cards and posters placed at cooperating merchants and on t-shirts given as prizes and promotions at remote broadcasts conducted at shopping malls or downtown locations. Appendix B contains an outline and chronology of the contest as it was implemented.

At about the mid-point of the contest (early March, 1990), a second set of observations of belt use was made. The observations were made at the same times and locations as the ones made prior to the start of the program. These are identified in the remainder of this report as the "during" contest or "program" observations. In the week after the close of the contest and coincident with the grand prize drawing (early April, 1990), a final set of observations was made. Again, the same locations and times (as in the two previous observations) were used for the "post" contest observations.

Every observation included the driver sex, estimated age, belt use and whether the driver was driving a pickup truck. Age and sex were needed to select the primary target group members from among all those observed. Belt use was coded as "correct" if the shoulder belt was clearly visible and deployed in the proper manner; "incorrect" if the shoulder belt was in use but not properly deployed, i.e., under the arm; or "none" if no shoulder belt use was visible.

WHY WILL WKMX GIVE AWAY THOUSANDS OF \$\$ TO SMART LISTENERS WHO ARE WEARING THEIR SEAT BELTS?

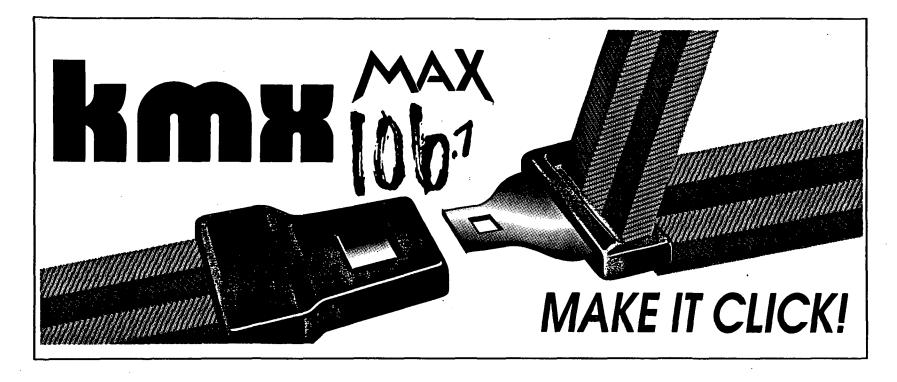
Because young Americans are often involved in serious accidents. Belts keep you in the drivers seat - where you belong - they give you maximum control of your car. That's why Maximum Music 106.7 wants you to buckle up and Make it Click.

Turn this entry in for a sticker with full contest rules and wear your seat belt every time you're in a car. If you do, you could win a daily prize of \$106.70 or the Grand Prize of \$1,006.70! All contest entries are also eligible to win a *Make it Click* T-shirt in a separate random drawing. No purchase necessary.

	nter the WKMX Make it Click Contest. ever I drive or ride in a car or truck!	I am a licensed driv	er, and I agree to
Name:			
Address:			
City:			
Phone:		Age:	(optional)

Figure 1.

Pledge Form



Note: Original background color is white. "KMX" and "MAX" are black. MAKE IT CLICK! and "106.7" are a bright orange. The belt itself is multi-toned gray and black.

Figure 2.

Make It Click! Bumper Sticker

All observations were conducted during afternoon and evening hours. They were divided between weekdays and Saturday. This was done to maximize the possibility of seeing young male drivers. Specific observation locations were selected to attempt to acquire as large a sample of drivers as possible from differing traffic flows. Five locations each were selected in Dothan and Enterprise. No suitable sampling sites were found in Ozark. An attempt was made to ensure that the traffic flows measured were "independent," i.e., limited the possibility of multiple measurements of the same stream of traffic, and carried a cross-section of traffic in the region. Approximately 1,500 observations were obtained in each period (i.e., baseline, program and post). The belt use rates for young drivers, male and female, were compared with use rates for older drivers across the data collection periods.

Another coordinated evaluation effort aimed at determining self-reported belt use and attitudes towards belt use was mounted by WKMX using a survey instrument prepared with the help of Dunlap. These survey forms were distributed at retail stores including fast food outlets from among the station's advertisers. The form is shown in Figure 3. This survey was conducted at three times corresponding to the baseline, program and post observations. Part 1 of the survey included questions on seat belt use, a description of the respondent and his/her vehicle use and a series of probes related to recall of radio exposure to safety messages. Both those messages which were part of the program (Make It Click!; Seat belts keep you in control; Seat belts save lives) and several general safety messages as distractors were included. Part 2 of the survey covered questions of specific interest only to the radio station.

In summary, the program was based on a contest conducted by WKMX which targeted the young male population of the region. The station designed and implemented the contest based on its extensive, current experience in conducting such events. Station advertisers were recruited to participate and station personnel conducted the observations needed to select winners. Dunlap provided production support and performed the evaluation of the program. Evaluation observations were made before, during and after the contest.

In the following Section of this report, the results of the program evaluation in terms of observation and survey results are presented. These results were not completely in accord with prestudy predictions. Therefore, the need for further investigation was indicated, and a subsequent follow-up effort was undertaken to probe the reasons behind the findings with various population groups in the test area. Section VII contains the report of that follow-up study.



Annearima	tely how many miles d		daire in 1000	10		
	·		•			
less 1,000	than 1–5,000 0	6-9,000 10		6,000 more		
In what typ	pe of vehicle do you sp	end the most ti	me as a drive	r?		
car e van	or utility picki or jeep	ip other truck	motor- cycle	other		
How often	do you use seat belts	when you drive	or ride in a c	ar?		
alwa	ays nearly som always time		never			
In past mor	nth, have you heard an	ything on radio	about		. •	
	Drunk driving?	ye	s no			
	Seat belts save lives?	? уе	s no			
	Make it click?	ye	s no			·
	Don't speed?	ye	s no			
	Seat belts keep you	in control? ye	s no			
Do you hea	ar or can you listen to	a radio at work	? ye	s no		
Your Sex:	male female	Your .	Age: 16-24	25-34	35 or older	
ART 2: Please	fill in your brief resp	onse.	•			
Besides mu	sic, what do you listen	to radio for mo	st?			
Besides cas	h, what one contest pri	ize would you m	ost like to w	in:		
If you hear	r or can listen to a rad	io at work, wou	ld you please	tell us:		
	re you work	•				
	-					-

Figure 3.

Safety Belt Use and Message Exposure Survey Form

VI. PHASE II: SURVEY AND OBSERVATION RESULTS

The initial data collection efforts for this program produced two sets of evaluation data: the safety belt self-report and message exposure survey and the belt use observations. The survey and the observations were each implemented prior to the start of the contest and then repeated in the middle of the contest period and again after the contest was completed. These are referred to as the baseline (or pre), program or (during) and post data collection periods.

It was hypothesized that the results of the survey and the observations would be highly, positively correlated. That is to say, it would be reasonable to expect that if exposure to safety belt messages and self-reported use increase, then observed belt use would also increase. Conversely, a decrease or static condition of self-reported use and/or exposure would suggest that observed safety belt use would not change. Thus, with regard to the *Make It Click!* contest, it would be expected that if the target group heard the messages (safety belts keep you in control, safety belts save lives, and *Make It Click!*) and took part in the contest, then the survey would show increased self-reported and aided message recall and the observations would indicate greater belt use.

In the following two sections, the results of the survey and of the observations are summarized.

A. MESSAGE RECALL AND SELF-REPORTED BELT USE SURVEY

This survey was made using the form shown in Figure 3 in the previous Section. That form was distributed at retail outlets selected from among WKMX advertisers. These were selected to achieve geographical dispersion over the entire WKMX listening area and to obtain a large representation of the primary target group of young males. Therefore, the selected sites were ones which the target group were likely to patronize: fast food outlets, record stores and sporting goods stores. Inside these establishments, however, no attempt was made to select respondents; every person entering the outlet was asked to fill out a form and leave it with the WKMX representative. Each site was visited for an hour during periods that were identified as high volume times by the outlet's manager. Knowledge of the likely flow through the sample sites led to a projected sample size of 1500 responses. In fact, 1,514 completed questionnaires were returned to WKMX and given to the project for analysis.

Table 16 shows the distribution of responses by age, sex and survey period. The primary target group for the study was young males between the ages of 16 and 24, and Table 16 indicates they were well represented in the sample. A review of Table 16 does not uncover any major difference in the distribution of respondents across sampling periods.

The overwhelming majority of the respondents (82.2%, 80.9% and 76.4% in the baseline, program and post periods, respectively) spent most of their driving time in a car or van. Pickup trucks were the next most frequently used vehicle (11.2%, 13.2% and 13.6%). The target group of young males, however, had a higher use of pickups than did the group of all other respondents. For young males ages 16-34, pickup use was 19.6 percent, 13.0 percent and 18.6 percent in the baseline, program and post periods, respectively. The equivalent percentages for all other respondents were 9.3 percent, 13.2 percent and 12.3 percent.

Table 16.

Characteristics of Survey Respondents

RESPONDENT AGE BY SURVEY PERIOD

•	16-24	25-34	35+	. NO ANSWER	SUM	
BASELINEI I	1801 36.8%I	1331 27.2%I				# Responses % of Period
PROGRAM I	1701 32.4%I	1641 31.3%I				# Responses % of Period
POST I	2051 40.9%I	1061 21.2%I	171 I 34 . 1% I	19I 3.8%I		# Responses % of Period
SUM I	5551 36.7%I	4031 26.6%1				# Responses % of Period

 $(\chi^2 = 15.2 \text{ with 4 d.f., p < .01})$

RESPONDENT GENDER BY SURVEY PERIOD

1.	MALE	FEMALE	NO ANSWER	SUM	
BASELINEI	218I	2541	171	4891	# Responses
I	44.6%I	51.9%I	3.5%I	100.0%1	% of Period
PROGRAM I	2501	2541	201	5241	# Responses
	47.7%I	48.5%I	3.8%I	100.0%I	% of Period
POST I	2441	2401	171	501I	# Responses
	48.7%I	47.9%I	3.4%I	100.0%I	% of Period
SUM I	7121 47.0%1	7481 49.4%1	•	1514I 100.0%I	# Responses % of Period

 $(\chi^2 = 1.9 \text{ with 2 d.f., n.s.})$

PRIMARY TARGET GROUP BY SURVEY PERIOD

,	16-24 MALE	ALL OTHERS	SUM	
BASELINE	•	3971 81.2%I	4891	# Responses % of Period
PROGRAM I	921 17.6%	4321 82.4%1	5241	<pre># Responses % of Period</pre>
POST	1021 20.4%I	3991 79.6%1	5011	# Responses % of Period
SUM I	2861 18.9%I	12281	15141	# Responses % of Period

 $(\chi^2 = 1.3 \text{ with 2 d.f., n.s.})$

The survey contained one question which dealt with self-reported seat belt usage. The prompt for this question was:

How often do you use seat belts when you drive or ride in a car?

The response choices were Always, Nearly Always, Sometimes, Seldom and Never. Table 17 presents the distribution of responses to this question by survey period for the target group and all other respondents. The differences from period-to-period are not statistically significant. The increase in the percent of the target group answering Always from the baseline to the program period (31.5% to 40.2%) is offset by a decrease of approximately the same amount in the Nearly Always category. There is also no significant change in the distribution of responses to this question for the group of all other respondents. Overall, self-reported belt use for both groups is relatively high, and, as will be seen later, much higher than shown by actual observation. The target group of young males does, however, admit to somewhat less belt use than do the remainder of respondents.

Under the assumption that a response of Always, Nearly Always or Sometimes would indicate some regular belt use, the responses were re-analyzed combining these categories. These results are shown in Table 18. Again, the change in self-reported use across sampling periods was not significant for either group. Table 18 does, however, highlight the small but consistent difference in self-reported use between the target group and the rest of the population. The lower use for the target group is consistent with expectation since they became the target group, in part, because of their previously reported low use of seat belts. Analyses were also conducted on self-reported seat belt use by vehicle type most often driven. These, too, showed no significant change across sampling periods for the total set of respondents. Those who drive cars or vans, however, were more likely to report they Always, Nearly Always or Sometimes were their belts than were pickup truck drivers (83.5% for cars and vans compared with 75.4% for pickups).

The next items were in a list on the survey and dealt with radio exposure to messages. The general prompt was:

In past month, have you heard anything on radio about:

Three of the subcategories covered were of specific interest to the study. These related to:

- Seat Belts Save Lives A general category of interest which should correlate with exposure to virtually any safety-oriented seat belt message.
- Make It Click! Aided recall of the specific tag line being used by WKMX as part of the test program.
- Seat Belts Keep You in Control The novel seat belt message included as part of the WKMX promotion.

The remaining two categories were general to highway safety and were added both as distractors and to see if there was any general sensitization to the subject area. These items were:

- Drunk driving?
- Don't speed?

Table 17.

Self-Reported Frequency of Seat Belt Use for Selected Subgroups by Sampling Period

Responses for Males 16-24 Years Old

SELF-REPORTED FREQUENCY OF SEAT BELT USE BY SAMPLING PERIOD

	ALWAYS	NEARLY ALWAYS	SOME- TIMES	SELDOM	NEVER	NO ANSWER	SUM	
BASELINE	291 31.5%1	201 21.7%		11 i 12.0% i	12I 13.0%I	I I		<pre># Responses % of Period</pre>
PROGRAM	371 40.2%1	111 12.0%I		11I 12.0%I	8i 8.7%i	1i 1.1%i		# Responses % of Period
POST	331 32.4%1	181 17.6%		141 13.7%I	81 7.8%!	1 i 1.0% i		# Responses % of Period
SUM	1 991 1 34.6%1	491 17.1%I		361 12.6%I	281 9.8%1	21 0.7%1		# Responses % of Period

 $(\chi^2 = 6.2 \text{ with 8 d.f., n.s.})$

Responses for All Other Respondents

SELF-REPORTED FREQUENCY OF SEAT BELT USE BY SAMPLING PERIOD

	ALWAYS	NEARLY ALWAYS	SOME- TIMES	SELDOM	NEVER	NO ANSWER	SUM	
BASELINE	i 1681 i 42.3%i		841 21.2%I	431 10.8%i	301 7.6%1	41 1.0%1		# Responses % of Period
PROGRAM	i 177i i 41.0%i		861 19.9%I	431 10.0%1	311 7.2%I	21 0.5%!		# Responses % of Period
POST	i 168i i 42.1%i		741 18.5%1	321 1%0.8	281 7.0%1	51 1.3%!		# Responses % of Period
SUM	i 5131 i 41.8%i		2441 19.9%I	1181 9.6%1	891 7.2%I	111 0.9%I		# Responses % of Period

 $(\chi^2 = 6.3 \text{ with 8 d.f., n.s.})$

Table 18.

Summarized Self-Reported Frequency of Seat Belt Use for Selected Subgroups by Sampling Period

Responses for Males 16-24 Years Old

SUMMARIZED SELF-REPORTED BELT USE BY SAMPLING PERIOD

,	ALWAYS, NEARLY, SOMETIMES	SELDOM OR NEVER	SUM	
BASELINE	691 75.0%1	231 25.0%I		# Responses % of Period
PROGRAM	721 79.1%I	191 20.9%I		# Responses % of Period
POST	791 78.2%I	22 I 21 . 8% I		# Responses % of Period
SUM	2201 77.5%1	641 22.5%1		# Responses % of Period
	•		,	

 $(\chi^2 = 0.5 \text{ with 2 d.f., N.s.})$

Responses for All Other Respondents

SUMMARIZED SELF-REPORTED BELT USE BY SAMPLING PERIOD

,	ALWAYS, NEARLY, SOMETIMES	SELDOM OR NEVER	SUM	
BASELINE	·	731 18.6%	393 i	# Responses % of Period
PROGRAM	3561 82.8%1	741 17.2%I		# Responses % of Period
POST	3341 84.8%1	601 15.2%I		<pre># Responses % of Period</pre>
SUM	10101 83.0%1	2071 17.0%1	12171	# Responses % of Period

 $(\chi^2 = 1.6 \text{ with 2 d.f., N.S.})$

The respondent was asked to indicate with a check mark if he or she had heard any of these messages on the radio. Media exposure questions were limited to the radio since the test program was completely radio-based and to be consistent with the fact that the survey was conducted by WKMX, a radio station.

Tables 19 through 23 present tabulations breaking down the responses to these five message exposure questions for the target group of 16-24 year old males and all other respondents. The data for the general exposure question related to seat belts saving lives (Table 19) indicates no differences over time. However, both the target group and all others almost universally reported hearing this message (over 80% in all time periods). Therefore, there was little room for change.

The situation is quite different with respect to the *Make It Click!* message, which was the specific tag line of the program. As shown in Table 20, the target audience of young males exhibited a greatly increased awareness of this tag line after the program began. During the baseline, 41.3 percent of the target group respondents said they had heard *Make It Click!* within the previous month. Although somewhat high for a "before" measure, it must be remembered that the tag line is one which has been widely used in other programs and is part of everyday vernacular. After the program begins, the proportion of the target group who recall hearing the tag jumps to 72.8 percent. This is an increase of 31.5 percentage points or a 76 percent increase. The percent remains high just after the conclusion of the program (68.6%). The distribution of responses is highly significant $(\chi^2 = 23.5 \text{ with } 2 \text{ d.f.}, p < .001)$.

All other respondents shown in Table 20 also obviously heard the *Make It Click!* message. However, their rise in response was only 19.3 percentage points from baseline to program for an increase of 54 percent. Nevertheless, this is a highly significant distributional shift ($\chi^2 = 45.2$ with 2 d.f., p < .001). Taken together, the data in Table 20 suggest that the target group was more aware of *Make It Click!* than the balance of the sample, but all people in the survey were well aware of the message. This is a strong indication of the market penetration of WKMX and the extent to which the tag line was memorable. It leads directly to the conclusion that a large proportion of the target audience and, in fact, everyone in the Dothan region were aware of the program.

The pattern of results for the message related to seat belts keeping a driver in control was quite different as shown in Table 21. For this message, there is no statistically significant change in target group responses across sampling periods ($\chi^2 = 1.6$ with 2 d.f., n.s.). All other respondents, however, showed a 12.0 percentage point increase from baseline to program (38.5% to 50.5%) and a continued increase to 53.1 percent saying they heard the message by the post period. This distribution is statistically significant ($\chi^2 = 22.8$ with 2 d.f., p < .001). Thus, the "control" message was conveyed by the program but not to the primary target audience.

The drunk driving message (Table 22) showed no significant change by sampling period for either the target group or all other respondents. As with the general safety belt message (Table 19), the vast majority of respondents reported hearing a drunk driving message on radio in the past month during all three sampling periods.

Table 23 indicates that significantly more survey respondents, regardless of group, reported hearing a speeding message in the program period than during the baseline ($\chi^2 = 13.0$ with 2 d.f., p < .01 for the target group; $\chi^2 = 7.8$ with 2 d.f., p < .05 for all others). This increase may have been the result of actual messages unrelated to this project or a general sensitization of the population to highway safety issues in general.

Table 19.

In past month, have you heard anything on the radio about Seat belts save lives?

for Major Respondent Subgroups by Sampling Period

Responses for Males 16-24 Years Old

	YES	NO	NO ANSWER	SUM	
BASELINE	75 I 81 . 5% I	161 17.4%1	1		<pre># Responses % of Period</pre>
PROGRAM I	781 84.8%I	91 9.8%1			# Responses % of Period
POST	82I 80.4%I	161 15.7%!			# Responses % of Period
SUM 1	2351 82.2%1	411 14.3%I			# Responses % of Period

 $(\chi^2 = 2.1 \text{ with 2 d.f., n.s.})$

Responses for All Other Respondents

1.	YES	NO	NO ANSWER	. SUM	
BASELINEI	3271 82.4%1	561 14.1%	141 3.5%		# Responses % of Period
PROGRAM I	3811 88.2%I	371 8.6%	141 3.2%	4321	<pre># Responses % of Period</pre>
POST I	351I 88.0%I	37) 9.3%	111 2.8%	3991 100.0%1	# Responses % of Period
SUM I	10591 86.2%I	1301 10.6%	39	12281	# Responses % of Period

 $(\chi^2 = 8.0 \text{ with } 2 \text{ d.f., p < .05})$

Table 20.

In past month, have you heard anything on the radio about Make it click?

for Major Respondent Subgroups by Sampling Period

Responses for Males 16-24 Years Old

	YES	NO .	NO Answer	SUM	
BASELINE		461	81 8.7%	92I 100.0%I	# Responses % of Period
PROGRAM	i 671 i 72.8%i	181	7: 7.6%1	921	# Responses % of Period
POST	701 1 68.6%	•	41 3.9%	1021	# Responses % of Period
SUM	I 175I I 61.2%I	921	191	2861	# Responses % of Period

 $(\chi^2 = 23.5 \text{ with 2 d.f., p < .001})$

Responses for All Other Respondents

	YES	NO I	NO ANSWER	SUM	
BASELINE		1881 47.4%I	661 16.6%	3971	# Responses % of Period
PROGRAM	2391 55.3%1	135 I 31.2% I	581 13.4%1	4321	# Responses % of Period
POST	218I 54.6%I	1091 27.3%1	721 18.0%	3991	# Responses % of Period
SUM	6001 48.9%1	4321 35.2%I	1961 16.0%	12281	# Responses % of Period

 $(\chi^2 = 45.2 \text{ with 2 d.f., p < .001})$

Table 21.

In past month, have you heard anything on the radio about Seat belts keep you in control?

for Major Respondent Subgroups by Sampling Period

Responses for Males 16-24 Years Old

	YES	NO	NO ANSWER	SUM	
BASELINE	• •	441 47.8%I	51 5.4%I	100.0%1	# Responses % of Period
PROGRAM	i 47i i 51.1%i	351 38.0%i	10I 10.9%I	92i 100.0%i	# Responses % of Period
POST	I 47I I 46.1%I	501 49.0%1	51 4.9%I	1021	# Responses % of Period
SUM	i 137i i 47.9%i iI	1291 45.1%I	201 7.0%1	2861 100.0%I	# Responses % of Period

 $(\chi^2 = 1.6 \text{ with 2 d.f., n.s.})$

Responses for All Other Respondents

	YES	NO	NO Answer	SUM	
BASELINE	· · · · · ·	1911 48.1%I	531 13.4%I	397I 100.0%I	# Responses % of Period
PROGRAM	I 218I I 50.5%I	1631 37.7%I	51I 11.8%I	4321 100.0%I	<pre># Responses % of Period</pre>
POST	I 212I I 53.1%I	1301 32.6%I	57I 14.3%I	399I 100.0%I	# Responses % of Period
SUM	i 5831 i 47.5%i	4841 39.4%I	1611	1228I 100.0%I	# Responses % of Period

Table 22.

In past month, have you heard anything on the radio about Drunk Driving?

for Major Respondent Subgroups by Sampling Period

Responses for Males 16-24 Years Old

	YES	NO	NO Answer	SUM	
BASELINE	·	131 14.1%	2	i 92i	# Responses % of Period
PROGRAM	I 80I I 87.0%I	7: 7.6%	5.4%		# Responses % of Period
POST	i 811 i 79.4%i	171 16.7%	3.9%	1021	# Responses % of Period
SUM	I 238I I 83.2%I	37) 12,9%	111	1 2861	# Responses % of Period

 $(\chi^2 = 3.5 \text{ with 2 d.f., n.s.})$

Responses for All Other Respondents

,	YES	NO	NO ANSWER	SUM	
BASELINE	337 84.9%		3.5%	100.0%	# Responses % of Period
PROGRAM	380 I 88.0%	39	I 13 I 3.0%	4321	<pre># Responses % of Period</pre>
POST	1 3411 1 85.5%		16 4.0%	i 399i	# Responses % of Period
SUM	1058 86.2%		43	12281	# Responses % of Period

 $(\chi^2 = 1.6 \text{ with 2 d.f., n.s.})$

Table 23.

Responses to the Question:

In past month, have you heard anything on the radio about Don't speed?

for Major Respondent Subgroups by Sampling Period

Responses for Males 16-24 Years Old

	YES	NO	NO ANSWER	SUM	
BASELIN	EI 481 I 52.2%I	401 43.5%			# Responses % of Period
PROGRAM	i 611 i 66.3%1	231 25.0%			# Responses % of Period
POST	i 441 i 43.1%i	511 50.0%	6.9%		# Responses % of Period
SUM	I 153I I 53.5%I	114) 39.9%	19	286i 100.0%i	<pre># Responses % of Period</pre>

 $(\chi^2 = 13.0 \text{ with 2 d.f., p < .01})$

Responses for All Other Respondents

,	YES	NO	NO ANSWER	SUM	
BASELINE	2101 52.9%I	36.0%	11.1%		# Responses % of Period
PROGRAM 1	2641 61.1%1	123	451 10.4%	4321	# Responses % of Period
POST	2381 59.6%1	112	49) 12.3%	3991	# Responses % of Period
SUM I	7121 58.0%	378	138	12281 100.0%1	# Responses % of Period

Overall, the results for the exposure questions related to seat belts indicate that the *Make It Click!* theme caused the largest change in target group responses while there was no significant impact on the target group from the message about "control." The "seat belts save lives" message was clearly the most prominent one for the entire surveyed group, although it was not differentially recalled by time period. Clearly, however, there was sufficient impact of the program on message recall to support an hypothesis that seat belt use behavior would change. This was examined with the observation data.

B. BELT USE OBSERVATIONS

The plan for observation of belt use, like the survey sampling plan, was designed to be implemented at locations and times that would increase the likelihood that members of the target group would be observed. This plan was exercised in a set of trial observations and a final protocol was developed. That protocol provided for recording:

- Driver sex and age--as observed/estimated by observer
- Belt use in the categories:
 - Correct Shoulder belt visibly worn correctly across the body
 - Incorrect Shoulder belt visibly worn but used incorrectly, e.g., under the arm nearest the belt anchor
 - Not used No conclusive evidence that the shoulder belt was being used.
- Vehicle type
 - Passenger car
 - Pickup truck

Ten different observation sites were selected, and observations were made at each site in each phase: baseline, program and post. Observations were made in the afternoon and early evening hours. Each site was given equal coverage in terms of the time and duration of the observation period. A total of 12,087 observations were made. Table 24 shows their distribution by sampling period as a function of belt use code. It can be seen from the Table that relatively few (89 of 12,087 or 0.7%) observations recorded "incorrect" seat belt use. Therefore, the "correct" and "incorrect" categories were combined as shown in the second part of Table 24 and in all subsequent tables. The resulting distribution by sampling period was not statistically significant ($\chi^2 = 2.6$ with 2 d.f., n.s.).

The observations of belt use as a function of driver age and gender are presented in Tables 25 and 26. The age categories in Table 25 correspond to those used previously in reporting the WKMX questionnaire results. Perhaps the most striking feature of these data is the apparent stability over all three sampling periods. Each of the age groups and both genders had virtually the same belt use in the baseline, program and post periods. None of the distributions by age or gender was statistically significant. The data presented in Table 26, however, show clearly that females use safety belts more frequently than males. The observed use rates for females are 10-12 percentage points higher than for males in all observation periods.

Table 24.

Observed Seat Belt Use by Sampling Period

COMPLETE BELT USE CODE BY SAMPLING PERIOD

,	NO	CORRECT	INCORRECT	SUM	
BASELINE	•	13901 38.4%1	191 0.5%1	3616I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM	22421 61.4%1	13911 38.1%	201 0.5%1	36531	<pre># Observed % of Period</pre>
POST	2880I 59.8%I	18881 39.2%	501 1.0%1	4818I	# Observed % of Period
SUM	73291 60.6%1	46691 38.6%	891	12087I 100.0%I	# Observed % of Period

 $(\chi^2 = 11.6 \text{ with 4 d.f.}, p < .05)$

COLLAPSED BELT USE CODE BY SAMPLING PERIOD

	DID NOT USE	USED	SUM	
BASELINE	61.0%1	1409I 39.0%I		# Observed % of Period
PROGRAM I	2242I 61.4%I	14111 38.6%1	3653I 100.0%I	# Observed % of Period
POST 1	28801 59.8%1	19381 40.2%I	4818I 100.0%I	# Observed % of Period
SUM 1	73291 60.6%1	47581 39.4%1		# Observed % of Period

 $(\chi^2 = 2.6 \text{ with 2 d.f., n.s})$

Table 25.

Observed Seat Belt Use by Sampling Period and Driver Age

Driver Age Less Than 25 Years Old

	DID NOT USE	USED	SUM	
BASELINE	-	211 i 35 . 5% i	5951	# Observed % of Period
PROGRAM I	4681 63.8%1	2651 36.2%1	7331 100.0%1	# Observed % of Period
POST 1	5721 61.0%I	3651 39.0%i	9371	# Observed % of Period
SUM I	1424I 62.9%I	8411 37.1%	22651	# Observed % of Period

 $(\chi^2 = 2.3 \text{ with 2 d.f., n.s.})$

Driver Age 25-34 Years Old

	DID NOT USE	USED	SUM	
BASELINE	_	6431 45.2%1	1424I 100.0%I	# Observed % of Period
PROGRAM I	6571 55.1%1	535 i	1192Î 100.0%Î	<pre># Observed % of Period</pre>
POST I	6981 53.0%1	6201	1318I 100.0%I	# Observed % of Period
SUM I	2136I 54.3%I	17981 45.7%I	39341 100.0%I	# Observed % of Period

 $(\chi^2 = 1.5 \text{ with 2 d.f., n.s.})$

Driver Age 35 Years Old or Older

,	DID NOT USE	USED	SUM	
BASELINE	1042I 1 65.2%I	555 I 34 . 8% I	15971	<pre># Observed % of Period</pre>
PROGRAM I	11171	611I 35.4%I	17281	# Observed % of Period
POST	16101 62.8%i	9531 37.2%I	25631	# Observed % of Period
SUM 1	37691 64.0%1	2119I 36.0%I	5888I 100.0%I	# Observed % of Period

 $(\chi^2 = 2.9 \text{ with 2 d.f., n.s.})$

Table 26.

Observed Seat Belt Use by Sampling Period and Driver Gender

Male Drivers

	DID NOT USE	USED	SUM	
BASELINE		7381 35.2%I	2095 I 100.0% I	# Observed % of Period
PROGRAM	-	7301 34.5%1	2115I 100.0%I	# Observed % of Period
POST	1709I 1 65.2%I	9131 34.8%1	2622I 100.0%I	# Observed % of Period
SUM	I 4451I I 65.1%I	23811 34.9%1	68321 100.0%1	# Observed % of Period

 $(\chi^2 = 0.2 \text{ with 2 d.f., n.s.})$

Female Drivers

,	DID NOT USE	USED	SUM	
BASELINE	850I 55.9%I	671Î	1521 I 100.0% I	<pre># Observed % of Period</pre>
PROGRAM	857I 55.7%I	6811 44.3%1	1538I 100.0%I	<pre># Observed % of Period</pre>
POST	1171I 53.3%I	10251 46.7%I	2196I 100.0%I	# Observed % of Period
SUM	2878I 54.8%I	23771 45.2%I	5255I 100.0%I	<pre># Observed % of Period</pre>

 $(\chi^2 = 3.2 \text{ with 2 d.f., n.s.})$

Tables 27 and 28 show belt use by sampling period, respectively, for males and females divided into age classifications. None of the distributions shown even approaches statistical significance. It is clear that belt use by the primary target group as well as all other drivers did not increase as the program progressed. It is noteworthy, however, that the "middle aged" (25-34 years old) drivers of both genders showed the highest belt use rates. This population likely includes a relatively high proportion of military personnel from Fort Rucker, which has a mandatory belt use policy.

Table 29 presents belt use separated by vehicle type. Pickup trucks were of particular interest because they are often used by the primary target group, and previous research has shown that their drivers use seat belts less often than people driving cars. Table 29 confirms that drivers of pickup trucks wear their belts about 10 percentage points less than the drivers of all other vehicles. It also shows that there was no significant change in belt use for either pickups or all other vehicle types across the sampling periods. It is worth noting that fully 17 percent of the observed sample of drivers (2,104 out of 12,087) were seen driving pickup trucks.

It must be concluded from the data just presented that no change in belt use attributable to the program were discerned. This was somewhat disappointing given that the survey results presented earlier indicated that the contest program was heard by a significant number of the target population. Available measures of the contest process also confirmed that it "got through" to the target population.

C. CONTEST RESULTS

The contest began in February. It was in place at all of the selected retail outlets and was on the air on the agreed-upon schedule (see Appendix B) by mid-month. The contest entry blank was in the form of the buckle up pledge which was shown earlier in Figure 3. This pledge was distributed at fast food outlets and exchanged for a window sticker which the entrant needed to have a chance for the cash prize. It was intended to evidence the entrant's promise--or pledge--to use safety belts whenever driving or riding in a car. There were 50,000 stickers printed of which all but a few thousand were distributed. The protocol for this study stated that whenever a sticker was given out, a pledge form was also to be given. Posters and a prominently displayed collection box encouraged the entrant to complete the pledge and place it in the collection box before leaving the restaurant. The restaurant staff and, on occasion, WKMX/Dunlap observers, encouraged people to complete and deposit the pledge form. Follow-up discussions indicated that the protocol was followed, which would mean that almost 50,000 pledges were distributed. Nevertheless, as shown in Table 30, only about 2,500 completed pledge forms (excluding duplicates and obvious practical jokes) were received and analyzed. It was impossible to determine any reason for this wide discrepancy. It is certain that many people simply ignored the pledge and took only the sticker. Busy retail workers were certainly in no position to determine if an entrant had actually dropped a pledge in the collection box. It is possible that several stickers were removed by a single entrant or that the fast food outlets' staff took a number of stickers and gave them to friends. Further, it might be conjectured that some collection boxes had been accidentally disposed of as trash.

Overall, the results of the contest and the promotion were disappointing. As noted in earlier sections, neither the survey of safety belt knowledge nor the observation of safety belt usage showed

Table 27.

Observed Seat Belt Use by Sampling Period and Age for Male Drivers

Male Drivers Less Than 25 Years Old

,	DID NOT USE	USED	SUM	
BASELINE	· •	981 30.0%I	327I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM	303 I 68.9% I	1371	440I 100.0%I	<pre># Observed % of Period</pre>
POST	3231 67.2%I	1581	4811 100.0%I	<pre># Observed % of Period</pre>
SUM	8551 68.5%I	3931 31.5%1	1248I 100.0%I	# Observed % of Period

 $(\chi^2 = 0.8 \text{ with 2 d.f., n.s.})$

Male Drivers 25-34 Years Old

	DID NOT USE	USED	SUM	
BASELINE	•	325 I 41.2% I	788I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM	3811 1 58.6%1	2691 41.4%1	100.0%1	<pre># Observed % of Period</pre>
POST	1 4181 1 58.9%1	2921 41.1%1	710I 100.0%I	<pre># Observed % of Period</pre>
SUM	1 12621 1 58.8%1 11-	8861	21481	<pre># Observed % of Period</pre>

 $(\chi^2 = 0.1 \text{ with 2 d.f., n.s.})$

Male Drivers 35 Old or Older

,	DID NOT USE	USED	SUM	
BASELINE	67.9%1	3151 32.1%I	9801	# Observed % of Period
PROGRAM		3241 31.6%1	100.0%1	# Observed % of Period
POST	9681 67.6%1	4631 32.4%I	1431 I 100.0% I	# Observed % of Period
SUM	23341 67.9%1	11021 32.1%I	34361	# Observed % of Period

 $(\chi^2 = 0.2 \text{ with 2 d.f., n.s.})$

Table 28.

Observed Seat Belt Use by Sampling Period and Age for Female Drivers

Female Drivers Less Than 25 Years Old

•	DID NOT USE	USED	SUM	
BASELINE	·	113 I 42.2% I	268I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM I	165 I 56.3% I	1281	293 I 100.0% I	<pre># Observed % of Period</pre>
POST	2491 54.6%I	2071	456I 100.0%I	# Observed % of Period
SUM	5691 55.9%1	448I	10171	# Observed % of Period

 $(\chi^2 = 0.7 \text{ with 2 d.f., n.s.})$

Female Drivers 25-34 Years Old

,	DID NOT USE	USED	SUM	
BASELINE	3181 50.0%1	3181 50.0%1	636I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM	2761 50.9%1	2661 49.1%1	542I 100.0%I	<pre># Observed % of Period</pre>
POST	2801 1 46.1%1	3281 53.9%1	6081	<pre># Observed % of Period</pre>
SUM	8741 1 48.9%1	912I 51.1%I		# Observed % of Period

 $(\chi^2 = 3.2 \text{ with 2 d.f., n.s.})$

Female Drivers 35 Old or Older

•	DID NOT USE	USED	SUM	
BASELINE	3771 61.1%I	2401 38.9%I	617I 100.0%I	<pre># Observed % of Period</pre>
PROGRAM	416I 59.2%I	287I 40.8%I	7031	# Observed % of Period
POST I	6421 56.7%1	4901 43.3%1	11321	<pre># Observed % of Period</pre>
SUM 1	14351 58.5%1	1017I 41.5%I	24521	# Observed % of Period

 $(\chi^2 = 3.3 \text{ with 2 d.f., n.s.})$

Table 29.

Observed Seat Belt Use by Sampling Period and Vehicle Type Driven

Pickup Trucks

,	DID NOT USE	USED	SUM	•
BASELINE	•	177 I 29.1% I	6091 1 % 0.001	# Observed % of Period
PROGRAM	4671	1701	637I	# Observed
	73.3%I	26.7%I	100.0%I	% of Period
POST 1	6311	227î	858I	# Observed
	73.5%I	26.5%î	100.0%I	% of Period
SUM 1	15301	5741	2104I	# Observed
	72.7%I	27.3%1	100.0%I	% of Period
			1	

 $(x^2 = 1.4 \text{ with 2 d.f., n.s.})$

All Other Vehicle Types

,	DID NOT	USED	SUM	
BASELINE		12321	3007I 100.0%I	# Observed % of Period
PROGRAM	1775 58.9%	1241I 41.1%I	3016I 100.0%I	# Observed % of Period
POST	22491 56.8%1	1711I 43.2%I	39601	# Observed % of Period
SUM 1	57991 58.1%	41841	99831	# Observed % of Period

Table 30.

Tabulation of Pledges to Use Seat Belts

	Age					
	16-24	25-34	35+	Unknown	Total	
		Male	S		12-7000-000-0	
N	421	226	237	105	989	
% of Age	41.6%	40.3%	41.1%	29.1%	39.4%	
% of Males	42.6%	22.9%	24.0%	10.6%	100.0%	
		Female	es .			
N	589	326	327	244	1,486	
% of Age	58.3%	58.1%	56.8%	67.6%	59.2%	
% of Females	39.6%	21.9%	22.0%	16.4%	100.0%	
	-	Gender Un	known			
N	1	9	12	12	34	
% of Age	0.1%	1.6%	2.1%	3.3%	1.4%	
% of Unknown	2.9%	26.5%	35.3%	35.3%	100.0%	
Total						
N	1,011	561	576	361	2,509	
% of Age	100.0%	100.0%	100.0%	100.0%	100.0%	
% of Total	40.3%	22.4%	23.0%	14.4%	100.0%	

any impact on belt use even though contest was widely known. The receipt of pledges from only 2,509 participants out of a potential 50,000 further indicated a lack of interest by the people who got stickers.

There were several possible explanations for the pattern of results obtained. Certainly, the fact that there was major flooding in the region during the program may have played a role. The disruption of a flood would be expected to have a negative effect. People were not able to go about their work in the usual way. They would also have been more concerned about property damage and personal safety than about buckling up to win a prize. It was also possible that the contest itself was not sufficient motivation to get people to wear seat belts. It was even conceivable, although not likely given the survey results and the extent of sticker distribution, that people were simply unaware of the contest.

It was decided to refocus the remaining parts of the study in an attempt to try to identify the factors which led to the unexpected, negative results. It was reasoned that any information on the reasons for the results obtained would be valuable assistance for future planning and countermeasure implementation aimed at young males and other high risk groups. Therefore, a follow-up data collection effort was undertaken in an attempt to identify at least some of the reasons for the results obtained. The development and conduct of that follow-up data collection effort are described in the next Section of this report.

VII. FOLLOW-UP DATA COLLECTION

A. PLANNING

The Dunlap staff undertook a careful review of the entire study in an attempt to determine what had led to the outcome. Also, WKMX and our on-site representative as well as the NHTSA personnel reviewed the findings in detail. It was concluded that there were no obvious major flaws in the program. As regards the discrepancy between stickers distributed (50,000) and pledges received (about 2,500), the distribution at the fast food outlets might have been mishandled. Every outlet had, however, given assurances that the process would be carried out very carefully. At the time of this follow-up (the beginning of June, 1990), it would have been practically impossible to obtain a valid reconstruction of how the distribution process went at each site. Further, since the survey as well as the observations indicated that the impact of the contest and of the message on belt use of the target group was negligible, it was decided that detailed interactions with target group members was needed. Therefore, a plan for structured interactions with small groups of people who had been exposed to the program was developed. A summary of the plan is contained in Appendix C.

B. IMPLEMENTATION

The initial step in this activity was to tabulate the completed pledge forms as shown previously in Table 30. This became the basis for recruiting discussion group participants. As indicated in Appendix C, seven different groups were planned. Participants were recruited by the Dunlap on-site representative. There were at least six participants in each group.

Five of the groups were made up of 16-24 year old males (who were the primary target group for this study). Two of these discussion groups were composed of civilians who had taken part in the Make It Click! contest and had provided their names on a pledge form. Another two were also composed of civilians, but were specifically selected to exclude people who had entered the contest, i.e., they did not sign a pledge or acquire and use a sticker. Potential members of these two groups were carefully screened to find those who knew about the contest but chose not to participate. Since there was extremely strong recall of the contest in the surveys already done, this group, because they heard about the contest and chose not to participate, was of more interest than those who were unaware of the program altogether. The fifth group of 16-24 year old males was drawn from the military at Fort Rucker. The separation of military and civilian groups was based on the fact that the military are under regulation to wear safety belts while on base which would be expected to yield differences in safety belt usage and attitudes.

The remaining two groups consisted of one group of 16-24 year old female civilians selected from among those people who signed the pledges and thus had participated in the contest; and one group of "all other" ages and sexes. The target mix for this group was two females less than or equal to 25 years of age, two females over 25 years of age and four males 25 years of age or older. Half of this "mixed" group was drawn from those who took the pledge, and the other half had not. The age/sex distributions were somewhat arbitrary, but provided a good cross-section. It was felt that this heterogeneous group might help provide an understanding of why recognition of *Make It Click!* increased so much but belt use did not. It must be recalled from the survey data that the message seemed to get through to these people even though they were not in the primary target audience for either WKMX or the test program.

A contact protocol was developed for approaching potential discussion group members, and a form was prepared to capture descriptive information about them. A structured list of topics was prepared to guide the discussions. In addition, a group composition form and discussion group confirmation form were provided to ensure that the necessary mix of participants was achieved. A discussion group confirmation letter was provided to be mailed to each participant a few days before his/her schedule time and day to serve as a reminder. These documents are presented in Appendix D of this report. The major categories of discussion topics are listed below:

- Demographic information
- Vehicle use
- Belt use behavior
- Attitudes toward belt use
- Seat belt laws
- Motivations
- Involvement with WKMX
- The Make It Click! campaign
- Suggestions for future programs.

The seven discussion groups were conducted in accordance with the developed plan. One project staff member served as the moderator for all the sessions and a second staff member and the site coordinator served as prompters. All the sessions were tape recorded and supplemented with notes as necessary. The demographic information was provided by all the participants before each session started and a small survey requested by WKMX was also completed.

The group of mixed ages and gender had only five members when it met because of broken appointments that were not known in time to recruit replacements. The three women and two men who did appear were either Army personnel or spouses of Army personnel. Nevertheless, discussions were conducted and are reported on here, but because of the small size of the group and their relationship to the Army, it was decided to recruit an additional replacement group. This eighth group was made up of three women and six men, all civilian except for one male military retiree.

C. DESCRIPTIVE RESULTS

The results of the focus groups consist of the tape recordings that were made at each session and the notes made by the moderator and the prompters. All of the content from these sources was reviewed, edited and compiled. A narrative report of each sessions was then produced. The comments of each of the participants were edited for clarity and organized by subject. These comments have been attached to each group's narrative report. The eight narrative reports are contained in Appendix E. In the remainder of this Section of the report, there is an overall summary of the responses of the eight groups taken together.

Across the eight focus groups, there were a total of 67 participants. Fifty-three were male and fourteen were female. Their ages ranged from 16 to 56. Twenty-three of the participants had signed a *Make It Click!* pledge form. Fifty-one participants said that they wore seat belts regularly, 13 said they wore them sometimes and three said they did not wear a belt at all.

When asked about the belt use of their families and friends, it appears that, in general, less than half of their friends and family wear belts regularly. Only those with close association with the military said that many of their family members and friends buckle up. This rate of self-report is consistent with the overall observed rate of belt usage in the program area.

Almost all the participants, including the "sometime" users, agreed that wearing a seat belt reduces the risk of injury in an accident. Only the nonwearers did not support that idea. Participant estimates of the actual overall area use rate ranged from 10 percent to 60 percent with the largest majority estimating between 10 and 25 percent. However, it was noted that use by military personnel in the area was very much higher.

Generally, most of the participants did not know whether Alabama had a seat belt law. Most knew that Alabama had a child restraint law and felt very strongly that this law is important and should be enforced. Most also felt that if a belt law was enacted, more people would buckle up. Some felt that it would have a negative effect on some drivers as many people do not like to be told that they have to change their behavior. One or two people argued that such a law would violate their individual rights and that adults should be allowed to choose whether or not to wear a belt.

All participants were asked why they did or did not wear safety belts and many reasons were given. Parental influence, personal experience or the experience of friends with motor vehicle accidents, and driver education programs in high school, were all cited by many of the participants as major reasons for wearing belts. The *Make It Click!* campaign was mentioned by several as a reason why they and some members of their families started to buckle up, and others said that the contest had encouraged them to become regular wearers of seat belts.

The occasional wearers mentioned that traffic and weather conditions affected their decision as to whether to put on a belt, and belt discomfort and forgetfulness were cited by others. For the nonwearers, there was a belief that good driving skills were all that were necessary to prevent an accident, and that belts are restricting. One participant was adamantly opposed to seat belts because she had been told that she would have been killed if she had been wearing one when she was involved in a serious accident.

When questioned about the non-use of belts by their peers, members of several of the groups said that many of their peers do not feel that it is "cool" to wear a belt. It was also pointed out that young men at this age are just emerging from parental and school authority and tend to rebel at being told that they must do something. It was said that if the young male is to be persuaded to wear a belt, there has to be a way of making that behavior appear acceptable. The use of appropriate young male role models in TV commercials might be an effective way to change perceptions of belt use among that group. It was also mentioned a number of times that their peers do not feel that an accident is going to happen to them and that many feel they can trust their own driving. Laziness was also noted as a possible reason why many of their peer group do not wear belts. They also noted that some people are afraid to wear belts because of a fear that they will be trapped if they are involved in an accident, and there is a need to dispel that myth.

It was suggested that insurance companies impose sanctions upon nonwearers of belts. It was felt that if insurance companies refuse to pay a claim if the individuals in the car were not belted, this would be a major motivation for people to change their belt habits. This suggestion was made by participants in six of the eight groups and was supported by most of the people present. It was noted that most of the participants were aware that the military is very successful in promoting seat belt among military personnel by using this type of insurance sanction combined with enforcement of the "law" or prevailing on-base regulation.

Many participants suggested that safety belt programs have to start with the very young, and probably parents have to be educated on the need to teach their children. Reactions were mixed to a suggestion that programs might be directed towards young women, who tend to wear their belts more often, in the hope that they might persuade their male friends to use belts. Generally, the male response was positive to this idea, but the females had less confidence in their ability to make such demands on their male companions.

Several people said that they thought the *Make It Click!* contest was a good idea for motivating people to buckle up and cited several instances where it had been successful among people they knew. All of the participants in all the groups were familiar with WKMX, the radio station which had sponsored the contest, and most were regular listeners. There was mixed reaction to the contest itself. Twenty-two of the participants were very familiar with the contest as they had signed pledges. The remaining participants all had some recall of the contest, and some remembered it in detail.

In discussing the contest itself, a number of problems became apparent. First, it appears that the contest was too complicated for most of these young people. Some admitted to being lazy, and they saw the process of entering this contest as being too much work. Most of them said that the pledge cards and stickers were not easily available. When they were told that they were obtainable from McDonald's, people in many of the groups pointed out that McDonald's is not the "in" place to go for people their age. Many of them also had problems with placing a sticker on their cars. They do not like the idea, and many said that they feel that stickers devalue a car. Even some of the people who did sign pledge cards did not follow through with a sticker for this same reason. Most agreed the prizes were large enough, but many said they would have been happier with smaller prizes if entering the competition had been easier.

With regard to suggestions for future contests, they would like to see contests run in the summer when they are out of school, have more time, and are apt to spend more time listening to the radio. They would like the contest to be simple. They would like the materials to be mailed to them. They would like many more prizes of less value. They even said they would be happy with a free T shirt. They would like the radio station van to pull them over if they were belted and if they had some kind of identification on the car like a ribbon on the antenna, and be awarded the prize on the spot.

D. IMPLICATIONS

There are a number of specific inferences which can be drawn from the follow-up effort and the detailed accounts of the focus groups presented in Appendix E. Some of these have to do with safety belt use generally, and some have to do with the *Make It Click!* contest and promotion. It is important to note that these conclusions reflect the mood and the consensus of all of the groups.

While the focus group approach is not amenable to quantification, the attitudes and opinions on which the conclusions are based are clearly evident in the information compiled from each group.

1. Safety Belt Use

- Throughout these group sessions, virtually every safety belt cliche and every common-wisdom reason for not using safety belts was heard:
 - Belts are uncomfortable or hurt.
 - It is better to be thrown clear of the crash than to be trapped in it.
 - Good drivers don't need belts.
 - It is an individual's right to choose whether or not to wear a belt.

These attitudes are persistent. It would be reasonable to conclude that in the area of this program they are perhaps especially strong.

- By contrast, many people in these groups--it would seem especially the younger ones--asserted that they wore belts. This was in response to a direct question. There was a feeling that some of the younger people gave this answer mostly because they knew it was the right thing to say. This situation has the hopeful aspect that the people are aware that belt use is expected.
- When asked about the "image" of safety belt use, several people said that some of "their friends" think that wearing safety belts is "wimpy" or not an "in" thing to do. But, when asked directly (as above), they said they did use safety belts, at least when riding or driving with parents, when driving young children or when a spouse, a girlfriend or someone else they admired used (and perhaps asked them to use) safety belts.
- Belt use could be affected for these people by "role models" such as celebrities, musicians and sports stars. It was also observed that messages including attractive people might be effective in encouraging use.
- Overall, these people expressed the attitude that belt use is best encouraged by examples of other people who are important to them. Practically all of the participants said they wore belts when driving their families. They saw themselves as role models. Also, they indicated they would respond to role models.
- A law or regulation by itself was seen to be of little value and in fact possibly counterproductive. If a law were supported by severe sanctions, such as an increase in insurance premiums, compliance, it was felt, would be enhanced.

2. The Make It Click! Campaign

- Considering that the campaign and contest ran for about six weeks, and these focus group audiences were WKMX listeners, there was a low recognition and recall of the specific program messages (Make It Click! and seat belts keep you in control) and of the contest features. Some of the identified reasons are:
 - The older participants tended to listen to WKMX less than did the younger.
 - The contest was seen to be too complicated, and prizes had to be claimed. Those who had this opinion then simply ignored the contest.
 - Mcdonald's was not the restaurant of choice among the younger people at that time. So the contest was ignored.
- Many participants, especially young males, were strongly opposed to putting any kind of sticker on their cars.
- There seemed to be an almost selective listening pattern in which people who tuned in WKMX heard the music for which they had selected the station and ignored anything else. When asked about safety belt messages, generally the most common reference was to TV and the visual messages such as the eggs in a box and the comedian routines.

3. Suggestions

The following list contains the positive comments or suggestions that were elicited from the groups:

- Radio contests like the *Make It Click* are popular, they are considered fun and many people participate actively (e.g., keeping a portable radio at work).
- The contest must be simple and the reward nearly immediate. For example, the *Make It Click!* could have been implemented with a WKMX car pulling over a car that had the sticker (and the driver was belted) and paying the prize on the spot. For the daily prize, the value was not important; a t-shirt was felt to be adequate, for instance.
- Many suggestions were made about the greater effectiveness of "shock" messages (mostly from young males).
- While there were no positive suggestions in this area, it was said by some of these people that both the messages and the contest announcements were easily missed. It was possible to listen selectively, in other words. Perhaps what is suggested is some kind of preparatory or alerting message that would precede the message of interest. The buckle clicking sounds were intended to serve this purpose, but they apparently were not very effective.

- The theme of family protection and responsibility was suggested as one that would have a substantial appeal.
- Finally, it can be observed that the Make It Click! and seat belts keep you in control messages are, in effect, attempts to sell an abstract concept: it is better to use safety belts than not. The sense of these groups was that an effective message would be keyed to people the listener values and to the need for responsibility. Ideas such as the following were expressed:
 - Protect your family.
 - Be a role model.
 - Respond to a role model.

These were judged by the participants to be potentially effective themes.

The follow-up data collection provided significant insights into understanding the pattern of quantitative results obtained. In short, the target audience was exposed to the contest, but, at most, they came away from it remembering only the tag line--Make It Click!. The complexity of the contest, the relatively small grand prize, e.g., compared to a motor home which WKMX had given away in a previous contest, a general lack of interest in the topic of highway safety in general and seat belts in particular, and a subtle, non-fear message (seat belts keep you in control) all likely contributed to the program's inability to change a significant amount of behavior. Nevertheless, much was learned about the process of dealing with high risk groups from this exercise. This led to the specific conclusions and recommendations contained in the next Section.

VIII. CONCLUSIONS AND RECOMMENDATIONS

Previous Sections of this report and its appendices present an extensive amount of information generated as part of the activities of this research project. These can be distilled into specific conclusions and recommendations related to the objectives of the effort.

A. CONCLUSIONS

The first objective of this project was to identify appropriate target groups of non-users of seat belts who are most likely to become involved in a crash. It can be concluded that this objective was met. Five distinct groups were identified each of which could be shown to fit a "high risk" definition from the literature, accident statistics and self-reported belt use. The process of defining these groups which was developed (see Section II) is, itself, a valuable product of this study.

The second study objective was to develop and test programs tailored to increase safety belt use by the identified high risk groups. Again, it must be concluded that this objective was met. At least one program was identified for each group (see Appendix A) which appeared feasible to implement. The program which was actually tested, operated as intended. That is, the selected media channel (radio) agreed to conduct the program, and there is strong evidence that the target audience was exposed to it. This provides support for the conclusion that the test scenarios identified for the other high risk groups by the same analysis process would also have been feasible.

Although it is possible to conclude that the process of identifying target groups and mounting test programs was successful, the data on program effectiveness clearly shows that the desired behavioral change was not achieved. Although the follow-up data collection produced some anecdotal reports of people who had begun using seat belts because of exposure to Make It Click!, both self-reported and observed belt use for all groups was unchanged by the program. Since the process of mounting the campaign appeared successful, it is reasonable to conclude that it was the content of the campaign itself that was ineffective. This conclusion is amply supported by the focus group results.

One of the bases for designing the specific attributes of the Make It Click! program was the past success of advertisers, in general, and WKMX, in particular, in employing similar approaches. These successes did not transfer to the current effort. It is believed that a large part of the failure of this effort to duplicate previous successes arose from the fact that commercial programs differ considerably from public service safety efforts. The "cost" to the participant of entering the Make It Click! contest was simply much higher than the typical promotions which draw patrons to McDonald's or similar establishments. The focus group statements that McDonalds is not an "in" place for young males fly in the face of numerous promotional successes by WKMX using the same fast food establishments. Further, the proportion of young males among the people whose pledges were tallied (421 out of 2,509 or 17% in Table 30 on page 73) is fully consistent with their proportion of the area's population as reported by Arbitron (1989). It therefore must be concluded that the way in which the fast food outlets were used was the main problem rather than their selection as a focal point of the effort.

An extensive amount of information related to programs intended to promote seat belt use by high risk groups was amassed by this project. This information provides a relatively clear understanding of the reasons seat belt use did not increase in response to this program. It also supports the conclusion that the basic approach embodied in the original study concept and implemented as described herein has merit and should be refined and tried again with young males or one of the other target groups.

B. RECOMMENDATIONS

As a result of this study, the following recommendations with respect to seat belt encouragement among defined high risk groups have been formulated:

- The basic approach of targeting high risk groups appears viable. It should therefore be continued both as a research effort and as a proposed community-based means of reducing highway deaths and injuries. The very notion of mounting a program aimed at those at highest risk seemed appealing to people approached during this project. Even though it was acknowledged that these groups are at high risk, in part, because of their intransigence, the challenge of going after groups whose highway safety payoff was large seemed to generate support.
- The use of incentives such as the contest tried in this study should not be discarded. It is well supported by the literature, generated sufficient interest from a successful radio station to enlist their support and was considered appropriate by the vast majority of focus group participants. It is obvious that the present effort misjudged the level of incentive needed to attract the attention of young males. This should not, however, be interpreted as evidence that the underlying approach is ineffective. Rather, it is recommended that further investigations be undertaken to determine the nature and extent of incentives (or disincentives) that are needed to prompt a behavioral change and whether this level can be realistically generated in a countermeasure program.
- People are still obviously relating seat belt messages to a direct, "blood and guts" approach. The focus groups indicated that they wanted to hear, quite specifically, what would happen to you if you did not buckle up. The creative staff at WKMX also wanted to employ this type of theme, but agreed to go along with the seat belts keep you in control message as part of the test. It is recommended that future efforts give strong consideration to reverting to the "classic" type of consequences description when attempting to influence high risk groups.
- There was much discussion in the follow-up groups of the vast potential of peer pressure, broadly defined, as a motivation for seat belt use. Whether employing children to "nag" their parents, spouses/dates or celebrities, the basic approach of making one feel "left out" if he/she did not buckle up was universally liked. It obviously cannot be concluded that messages of this type would have succeeded where the ones actually tried failed. However, the sentiment for this approach was sufficiently strong to suggest that its use be explored in future research and encouragement programs.

REFERENCES

Arbitron Company. Condensed Radio Market Report. Audience Estimates in the Metropolitan Statistical Area and TSA for: Dothan, AL. The Arbitron Company, New York, Spring 1989 (March 30-June 21).

Blomberg, R.D. and Preusser, D.F. "Guidelines for the use of existing materials and the preparation of new printed materials." In: *The Media and Drug Abuse Messages*. Executive Office of the President, Special Action Office for Drug Abuse Prevention, Washington, D.C., monograph series D Number 1, April 1974, pp. 61-72.

Blomberg, R.D. and Preusser, D.F. Identification and Test of Pedestrian Safety Messages for Public Education Programs. Final Report to the National Highway Traffic Safety Administration, June 14, 1974, Dunlap and Associates, Inc., Darien, Connecticut, ED 74-3.

Blomberg, R.D., Preusser, D.F., Hale, A. and Leaf, W.A. Experimental Field Test of Proposed Pedestrian Safety Messages. Final Report to the National Highway Traffic Safety Administration, Contract No. DOT-HS-4-00952, Dunlap and Associates, Inc., Darien, Connecticut: 3 Vols. November 1983.

Blosser, B.J., Levy, S.R. and Holden, J.A. The Highway Safety Mass Media Youth Project: A Media Campaign Aimed at Drunk Driving and Seat Belt Use. Paper presented at International Communication Association Meeting, May 1985.

Campbell, B.J., Hunter, W.W., Gemming, M.G. and Stewart, J.R. Seat Belts Pay Off. The Use of Economic Incentives and Public Education to Increase Seat Belt Use in a Community. General Motors. March 1984.

Chethik, B. and McHenry, P. Field Test: A Motivational Training Package for Automobile Dealers and Sales Personnel. DOT-HS-652, NHTSA, June 1983.

CM3 Associates. Washington State Traffic Safety High Risk Population Study: With Implications for Future Public Information/Education Programs. Conducted in association with Thomas Galdabini Marketing Research and Planning for the Washington Traffic Safety Commission, 1987.

Colletti, C. "Dormitories wired for entertainment." Advertising Age, Special Report, February 2, 1987.

Coonley, P.S. and Gurvitz, C.E. Assessment of Insurance Incentives for Safety Belt Usage, DOT-HS-474., NHTSA, May 1983.

Donahue, W.A. "Issues of risk in adult and teen safety belt use." Alcohol, Drugs and Driving, 4(3-4), July-December, 1988.

Edell, J.A. and Burke, M.C. "The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(3), December 1987.

Evans, L. Belted and unbelted driver accident involvement rates compared. *Journal of Safety Research*, 18, 57-64, 1987.

Evans, L. and Wasielewski, P. Risky driving related to driver and vehicle characteristics. *Accident Analysis and Prevention*, 15, 121-136, 1983.

Fhaner, G. and Hane, M. "Seat belts: changing usage by changing beliefs. *Journal of Applied Psychology*, 60(5), pp.589-598, 1975.

Finn, P., Hodgdon, J., Beauregard, M., Shapiro, E., Zaman, S. and Stein, M. Risk Taking and Safety Restraint Usage of Young Drivers: Technical Report of Experimental Study, April 1985.

Geller, E.S., Lehman, G.R., Kalsher, M.J. and Rudd, J.R. A Commitment/Incentive Program to Increase Safety Belt Use on a University Campus. DOT HS 897 110, NHTSA, January 1986.

Geller, E.S. Corporate Incentives for Promoting Safety Belt Use: Rationale, Guidelines and Examples, DOT HS-806-389, NHTSA, October 1982.

Geller, E.S., Rudd, J.R., Kalsher, M.J., Streff, F.M. and Lehman, G.R. "Employer-based programs to motivate safety belt use: A review of short and long-term effects." *Journal of Safety Research*, <u>18</u>, pp. 1-17, 1987.

Geller, E.S., Bruff, C.D. and Nimmer, J.R. "Flash for life: community-based prompting for safety belt promotion." *Journal of Applied Behavior Analysis*, 18,(4), Winter 1985.

Geller, E.S. and Hahn, H.A. "Promoting safety belt use at industrial sites: an effective program for blue collar employees." *Professional Psychology: Research and Practice*, 15,(4), pp. 553-564, 1984.

Gilbert, L. "How to identify target customers." Retailing, 12-14, July 11, 1988.

Green, R.N. and Sharpe, G.S. "Contributory negligence in the promotion of safety belt use," in Automotive Technology, Information Needs of Highway Users and Promotion of Safety Belt Usage. Washington, DC: U.S. Transportation Research Board, 1982.

Grimm, A.C., Wiviott, M.B.J. and Siegal, M. Occupant Protection Public Information Materials Catalog. Number 7. DOT-HS-9-02209, NHTSA, June 1985.

Heathington, J.W., Philpot, J.W. and Perry, R.L. "Impact of legislation and public information and education on child passenger safety," in *Automotive Technology, Information Needs of Higher Users and Promotion of Safety Belt Usage*. Washington, DC: U.S. Transportation Research Board, 1982.

Hunter, W.W., Stutts, J.C., Stewart, J.R. and Rodgman, E.A. Overrepresentation of Seat Belt Non-Users in Traffic Crashes: Final Report. Contract No. DTNH22-Z-86-07392, National Highway Traffic Safety Administration. Highway Safety Research Center, University of North Carolina, Chapel Hill, NC, 1988.

Jonah, B.A. and Grant, B.A. Long Term Effectiveness of Selective Traffic Enforcement Programmes for Increasing Seat Belt Use. Technical Memorandum TMRU 8302. Ottawa, Canada: Road Users Division, Transport Canada, 1982.

Jonah, B.A. and Wilde, G.J.S. "Promoting seat belt use: a comparison of three approaches." In: 26th Annual Proceedings, American Association for Automotive Medicine, Ottawa, Canada, Road Safety Branch, Transport Canada. October 4-6, 1982.

McAfee, R.B. and Winn, A.R. "The use of incentives/feedback to enhance work place safety: a critique of the literature." Journal of Safety Research, 20,(1), 7-19, 1989.

McKnight, A.J. and McPherson, K. "Four approaches to instruction in occupant-restraint use," In: Automotive Technology, Information Needs of Highway Users and Promotion of Safety Belt Usage. Washington, DC: U.S. Transportation Research Board, 1982.

McNabb, S.D. and Dueker, R.L. Development and Test of Motivational Approaches for Increasing Use of Restraints. DOT HS-806-266, NHTSA,. February 1982.

Mayas, J.M., Boyd, N.K., Collins, M.A. and Harris B.J. A Study of Demographic, Situational, and Motivational Factors Affecting Restraint Usage in Automobiles: Final Report. Contract No. DTNH-80-C-17278, National Highway Traffic Safety Administration. Lawrence Johnson and Associates, Washington, D.C., February 1983.

McCartt, A.T., Dowling, A.M. and Rood, D.H. Evaluation of New York State's Mandatory Occupant Restraint Law: Fatalities and Injuries Among Motor Vehicle Occupants Covered by the Law: Final Report. Contract No. DTNH22-84-C-07467, National Highway Traffic Safety Administration. Institute for Traffic Safety Management and Research, Albany, NY, 1987.

Merrill, B.E. and Sleet, D.A. "Safety belt use and related health variables in a worksite health promotion program." *Health Education Quarterly*, 11(2), 171-179, 1984.

Merrill, B.E. and Sleet, D.A. Safety Belt Use and Health: An Analysis of Control Data Corporation's Employee Population. DOT-HS-806-633, NHTSA, 1984.

National Association of Women Highway Safety Leaders, Inc. Alcohol and Safety Belt Education Program. February 1986.

National Center for Statistics and Analysis. Papers on Seat Belts Effectiveness and Use. NHTSA, June 1988.

NHTSA. Study of Methods for Increasing Safety Belt Use. Washington, D.C. 1981.

Nichols, D. "Motivating part-timers." Incentive, 45-50, February 1989.

Nimmer, J.G. and Geller, E.S. "Motivating safety belt use at community hospital: an effective integration of incentive and commitment strategies. *American Journal of Community Psychology*, (in press).

NTIS. Citations from the NTIS Bibliographic Database--Automobile Safety: Seat Belts. November 1984-October 1988.

Partyka, S.C. Papers on Adult Seat Belts--Effectiveness and Use. NHTSA Technical Report, January 1984-May 1988.

Phillips, B.M. Restraint System Usage in the Traffic Population. 1. Automobile Safety Belts, 2. Child Restraint Seats, 3. Motorcycle Helmets. NHTSA, May 1983.

Preusser, D.F., Lund, A.K., Williams, A.F. and Blomberg, R.D. "Belt use by high-risk drivers before and after New York's seat belt use law." *Accident Analysis and Prevention*, 20, 245-250, 1988. Preusser, D.F., Williams, A.F. and Lund, A.K., "Seat belt use by New York Bar Patrons." *Journal of Public Health Policy*, 7(4). 470-479, 1986.

Preusser, D.F., Williams, A.F. and Lund, A.K., "The effect of New York's seat belt use law on teenage drivers." Accident Analysis and Prevention, 19, 73-80, 1987.

Rood, D.H., McCartt, A.T., Kraichy, P.P. and Carman, J.A. Evaluation of New York State's Mandatory Occupant Restraint Law - Vol. IV, Enforcement and Adjudication of Violations of the Law: Final Report. Contract No. DTNH22-84-C-07467, National Highway Traffic Safety Administration. Institute for Traffic Safety Management and Research, Albany, New York.

Rudd, J.R. and Geller, E.S. "A university-based incentive program to increase safety belt use: toward cost-effective institutionalization". *Journal of Applied Behavior Analysis*, 18,(3), 215-226, 1985.

SAS Institute, Inc. SAS Users Guide: Statistics. SAS Institute, Inc., Cary, North Carolina, 1982

Saunders, S. and Pine, J. "Seat belt education program--a model for public health settings." *Health Education Quarterly*, 13(3), 243-247, 1986.

Scott, R.E. and O'Day, J. I Do Not Wear Safety Belts Because. The University of Michigan, Transportation Research Institute. September 1983.

Sleet, D.A. "Reducing motor vehicle trauma through health promotion programming." *Health Education Quarterly*, 11(2), 113-125, 1984.

Strazewski, L. "Building for the future." Advertising Age, Special Report, July 19, 1984.

Thyer, B.A., Geller, E.S., Williams, M. and Purcell, E. "Community-based 'Flashing' to increase safety belt use." *Journal of Experimental Education*, undated.

Thyer, B.A. and Geller, E.S. "The 'Buckle-Up' dashboard sticker. An effective environmental intervention for safety belt promotion." *Environment and Behavior*, 19,(4), pp. 484-494, July 1987.

Wagenaar, A.C., Streff, F.M., Molnar, L.J.. Businski, K.L. and Shultz, R.H. Factors Related to Nonuse of Seat Belts in Michigan: Final Report. Contract No. DTNH22-86-Z-07342, National Highway Traffic Safety Administration and Office of Highway Safety Planning, Lansing, Michigan. Transportation Research Institute, University of Michigan, Ann Arbor, Michigan, 1987.

Waller, P.F., Li, L.K., Stewart, J.R. and Ma, J.M. Evaluation of the Effect of Perception of Risk Messages on Observed Safety Belt Usage. DOT-HS-806 595, NHTSA, May 1984.

Walsh, D.L. "Changing youth: world issues to self interests." Marketing Communications, 47-54, March 1986.

Ware, A., Cook, R. and Orme, T. Motivation of Employers to Encourage Their Employees to Use Safety Belts. DOT HS-806-498, NHTSA, August 1983.

Wasielewski, P. "Speed as a measure of driver risk: observed speed versus driver and vehicle characteristics." Accident Analysis and Prevention, 16, 89-103, 1984.

Williams, A.F., Lund, A.K., Preusser, D.F. and Blomberg, R.D. "Results of a seat belt use law enforcement and publicity campaign in Elmira, New York." *Accident Analysis and Prevention*, 19(4), 243-249, 1987.

APPENDIX A

SCENARIO OUTLINES FOR EACH CANDIDATE HIGH RISK GROUP

INTRODUCTION

The analyses for this study identified five high risk target groups (Section II):

- 18-24 year old males (particularly unmarried with lower socioeconomic status and lower educational attainment)
- Drinkers (younger, with lower socioeconomic status and lower educational attainment)
- Elderly in states without mandatory safety belt use laws
- Unemployed males (with lower socioeconomic status)
- Smokers (younger).

Communications approaches were analyzed for each of these groups. Tables 11-15 enumerate various alternative approaches based on combinations of medium, setting and message. One of these was selected for each target group and expanded into a complete test scenario.

This Appendix contains a summary of the scenarios developed. It must be remembered that these were conceived for the purpose of testing the impact of the communications approach on the particular target group. Therefore, it was necessary not only to be able to target the message to the group, but also to be able to identify group members who received the message and observe their seat belt use behaviors.

Target Group: Young Males Ages 18-24

Target Reason(s) for Not Buckling Up: Inadequate concern for risk; Macho image; Feelings of indestructibility

Communication Channel: Radio targeted at the specific age group

Specific Media: Radio game with significant prizes coupled with print including bumper stickers, stand-up cards, etc.

Motivational Approach: Incentive to buckle up and win a prize

Message Content: You can win if you're seen driving with your safety belt on

Scenario Exposure Paradigm: Actual contest in a small city (population 50,000 or so) on a youth-oriented station. Listeners would write in to enroll and receive a bumper sticker. Random observations of bumper sticker equipped cars would be used to select winners.

Method of Target Audience Identification: Estimated driver age during the pre period; age and the existence of bumper stickers during the post period.

Effectiveness Measure(s): Percent belt use by estimated age from direct observations.

Measurement Paradigm: Observers deployed throughout the community to observe belt use and estimate driver age on a pre-post basis.

Expected Baseline Use %: 15% (non-law states); 30% (law states)

Expected Post Program Use %: 35% (non-law states); 45% (law states)

Target Group: Drinkers (heavy, e.g., 5+ drinks at one sitting during last 30 days)

Target Reason(s) for Not Buckling Up: Lack of caring about health, law and other relevant issues; Insufficient fear of apprehension

Communication Channel: Bars (roadhouses) in states with a safety belt law

Specific Media: Posters and pamphlets in the bar and outdoor signs at the exits to the parking lots

Motivational Approach: Disincentive

Message Content: The police know that drinking drivers do not use safety belts. Do you want to be stopped by the police?

Scenario Exposure Paradigm: After a baseline use measurement at 6 bars, the message would be presented in four of the bars beginning on a Monday. The two bars without the message would be used as controls. Additional measurements would be taken on Friday and Saturday nights for two successive weeks at each of the 6 bars.

Method of Target Audience Identification: All drivers leaving the bar

Effectiveness Measure(s): Percent safety belt use; Net percent of positive changes (unbelted to belted) from entry to exit measure; Percent difference between experimental and control sites

Measurement Paradigm: Belt use observations of all people entering and leaving the bar parking lots would be taken. The measurements would be correlated (i.e., license plates would be recorded) so that belt use changes for the same driver between entry and exit could be determined.

Expected Baseline Use %: 20-25%

Expected Post Program Use %: 35-40%

Target Group: Elderly (65+) in non-law states

Target Reason(s) for Not Buckling Up: Habit and lack of compulsion

Communication Channel: Personal encounter with a facilitator

Specific Media: Two levels of media will be needed. The first will be a package of materials for the intermediary/facilitator such as a local safety council member or police officer. These might include a "training" manual, video and or promotion kit. The second level of materials will be pamphlets posters and a video for the intermediary to show to and/or leave with the elderly.

Motivational Approach: Self image; Respect

Message Content: Do you want to be associated with the other groups who do not buckle up, e.g., "bad" kids, drinkers, smokers, speeders? If there was a law you would buckle up, so why not obey the law of reason? Do you want to set a bad example for [children][your grandchildren]? How can you command the respect due your maturity if you act irresponsibly?

Scenario Exposure Paradigm: A small (< 25,000 population) retirement community will be targeted with local facilitators. Presentations will be made at as many gatherings as possible including living complexes, shopping malls, social clubs and motor vehicle offices.

Method of Target Audience Identification: Estimated age. Those exposed will be identified based on place and time of presentations.

Effectiveness Measure(s): Percent use pre/post and entry and exit to the facilities

Measurement Paradigm: Observers will take a general level of belt use for the community before and after the program. In addition, arriving and departing use rates at the sites of presentations will be made.

Expected Baseline Use %: 15%

Expected Post Program Use %: 35%

Target Group: Unemployed males

Target Reason(s) for Not Buckling Up: Uncaring attitude; Abundance of other personal problems; lack of knowledge of value of belts

Communication Channel: Unemployment office in a safety belt law state

Specific Media: Pamphlet; posters; message printed as part of a standard document, e.g., list of job openings, routinely distributed

Motivational Approach: Disincentive

Message Content: You are in no position to pay a fine for getting a safety belt ticket or medical expenses from an injury in an automobile accident

Scenario Exposure Paradigm: Material would be distributed for one complete "cycle" of the unemployment office, i.e., the length of time between mandatory visits for people who signed up for benefits on the first day of distribution.

Method of Target Audience Identification: All people entering and exiting the office and going to a car during the test period,

Effectiveness Measure(s): Overall percent increase pre to post; Percent increase entry to exit during the distribution period; Percent repeat users (if possible from license plate recording).

Measurement Paradigm: Observers would record belt use rates on arrival and departure for one week before distribution and daily throughout the distribution cycle.

Expected Baseline Use %: 20-25%

Expected Post Program Use %: 35-40%

Target Group: Smokers

Target Reason(s) for Not Buckling Up: Lack of concern for risks and appreciation of benefits; Absence of conceptualization of the motivation for not using safety belts

Communication Channel: Point of tobacco sale and/or mail-in program

Specific Media: Posters; In-store displays; Pamphlet; Premium

Motivational Approach: Life style improvement and/or incentive

Message Content: You get pleasure from smoking [so it is worth taking some risk]. There is no equivalent pleasure from not buckling up. Therefore, there is no reason to take the risk. Alternatively, sign a pledge to always buckle up and drop it in a box and we will send you a premium, e.g., a lighter which says Remember to Buckle Up.

Scenario Exposure Paradigm: Materials would be available and handed out at candy stores and other locations selling large volumes of cigarettes "by the pack" as opposed to carton sales. One candy store (or drug store) location would be have a "take the pledge" display and smokers would be eligible for a free gift if they agree to always buckle up. One candy store would only have information on belt use and a third store would be used as a control.

Method of Target Audience Identification: People purchasing tobacco would have their purchase put in a brightly colored bag which could easily be seen by an observer. A separate color could be used for those who did and did not "take the pledge"

Effectiveness Measure(s): Percent belt use as a function of type of communication exposure both pre/post and changes between entering and leaving the store.

Measurement Paradigm: Two different shops in small centers would be used as test sites with a third used as a control. The shops would be selected as places which sell a high volume of cigarettes. All tobacco purchasers would be given a different color bag or other observable carry-away during the baseline period. Observations of belt use entering and exiting the store would be made. After distribution of materials, additional observations would be made for five successive days at each of the locations.

Expected Baseline Use %: 15% (non-law states); 25% (law states)

Expected Post Program Use %: 30% (non-law states); 35% (law states)

APPENDIX B

OUTLINE OF WKMX/DUNLAP MAKE IT CLICK! CONTEST

INTRODUCTION

This Appendix presents a chronology and summary description of the countermeasure which was mounted as part of this program. As described in the body of the text, this countermeasure was a contest run by a radio station, WKMX-FM in the Enterprise/Dothan/Ozark area of Alabama.

The contents of this Appendix were compiled from various project memoranda and letters of agreement between the project and WKMX.

Outline of WKMX/Dunlap Make it Click! Contest

Objectives:

- To increase safety belt use among young males (18-24 as the primary group with 25-35 as the secondary target) in the Enterprise/Dothan/Ozark area with particular emphasis on those out of school and in the work force or looking for a job.
- To increase general awareness of the benefits of safety belt use in the Enterprise/Dothan/Ozark communities with particular emphasis on the target group of young males.
- To develop, evaluate and document a program approach to increasing safety belt use among high risk drivers which can be widely adopted and adapted by other radio stations which target young males.

Schedule:

	4
Week of 27 November 1989 -	WKMX/Dunlap agreement on contest details.
Week of 4 December 1989 -	Dunlap provides WKMX with draft of window sticker and a poster concept and list of contest themes and messages. WKMX comments and the list is finalized by the end of the week.
Week of 11 December 1989 -	Dunlap orders window stickers and WKMX works on creative development. WKMX takes photographs for the campaign posters.
Week of 18 December 1989 -	Meeting in Enterprise to discuss creative development, creative themes and the final contest details. Dunlap takes back poster photos for final camera-ready layout.
Week of 8 January 1990 -	Stickers are delivered to WKMX. Baseline belt use data collection and knowledge survey are started.
Week of 22 January 1990 -	All baseline data collection is completed. Poster printing is completed. All scripts/notes for personalities are completed. Dunlap prepares prize selection random drawing plan.
Week of 29 January 1990 -	Extra week for "catch-up."
Week of 5 February 1990 -	"Teaser" messages relating to the chance to win and introducing the <i>Make it Click!</i> tag are aired. No specific mention of safety belts. No distribution of window stickers.
Week of 12 February 1990 -	Contest details announced and distribution of window stickers and posters.

Monday, 19 February 1990 - Contest begins. First daily prizes awarded. Contest promotion and distribution of stickers continues.

19 February - 11 March 1990 - Two winners per day are selected and announced. Prize redemption takes place. Number of daily license plates announced varied to account for rate of redemptions.

Week of 19 March 1990 - Additional prize winners are drawn to bring the total redeemed daily prizes to 40. Widespread flooding due to

torrential rains strikes the area.

7 April 1990 - Grand prize drawing and press conference/"event" to announce the winner (postponed from 24 March).

Eligibility:

Contest was open to all licensed drivers who:

- Displayed window sticker distributed by radio station through cooperating retail outlets. The sticker was accompanied by safety belt information and contest rules printed on the back of the sticker. Stickers were distributed in an environment containing safety belt messages on posters and after the contestant agreed to sign a pledge to buckle up.
- Correctly wear shoulder belt when viewed by a contest observer. Instructions on correct use of safety belts were one of the minor campaign themes.

Selection of Winners:

Dunlap and Associates, Inc. created a random plan for observing belt use. A list of observation locations in terms of time of day and day of week were sent to WKMX. WKMX assigned regular radio station personnel to visit the randomly selected locations at the randomly selected daylight hours. The WKMX observer recorded the license plate number and registration state of the first two vehicles observed which met the eligibility requirements. These were broadcast on the following contest day (weekday or weekend as applicable) throughout the day along with buckle-up messages. The winner had five (5) business days (Monday to Friday, 9 am to 5 pm local time) to redeem the daily prize. These were the daily winners.

The grand prize was awarded to one of the daily winners selected at random in a public drawing. The drawing was made by a local judge.

Prizes:

Each person whose license plate was mentioned on the air and who followed the redemption procedure received \$106.70 in cash plus a t-shirt. These daily winners were entered into a random drawing for a \$1,006.70 grand prize drawn at the end of the contest. Random drawings for Make It Click! t-shirts were held among people who completed the pledges to buckle-up and volunteered their name and address to be entered in the drawing.

Prize Redemption:

In order to win a daily prize, a person had to appear at the WKMX offices in Enterprise in the vehicle whose license plate was observed. The window sticker must still have been attached. A valid drivers license and registration card had to be shown. The driver had to be either the registered owner, have the same last name as the registered owner or have a letter signed by the registered owner giving the driver permission to use the vehicle.

Daily winners filled out a standard WKMX receipt and release for a cash prize.

WKMX maintained a master list of winners to insure that each winner was only paid once.

The specific contest rules as printed on the back of the window sticker are shown below:

IF YOU PUT THIS STICKER ON THE OUTSIDE OF YOUR CAR'S REAR WINDOW AND WEAR YOUR SEAT BELT AT ALL TIMES, YOU COULD WIN \$1,006.70!

OFFICIAL RULES:

RO ENTER: Listen to WKMX-FM 106.7 on your radio dial. Only WKMX Listeners will win. Contest is scheduled to begin February 19, 1990 and ends March 25, 1990. Each day, Monday through Sunday, at various times throughout the day, MMX will announce he or more winning license plate numbers. Do not call at this time! Just tollow me directions below to collect your prize.

TO WIN: In order to win, you must get a WKMX Make if Click sticker with these rules printed on the back from a participating retailer or at the WKMX offices and sign a pledge to wear your safety belt every time you are in a cut. This sticker must be displayed on the back of your vehice. The bottom of the rar window is the recommended location, but any visible place on the back of the vehicle will make you eligible. The weath also place you will be sufficient and or contently wearing a safety belt will be selected at random as the contest winners.

PRIZES: Winners who meet the contest qualifications will receive \$106.70. In addition, their names with tentered into a random drawing for a grand prize of \$1,006.70.

OTHER RULES AND QUALIFICATIONS: In order to win a \$106.70 prize, the winner must appear in person at the WKMX offices in Enterprise, Alabama during regular business hours, Monday through Fndays, except holidays, within the (6) business days from, but not including, the day on which the winning license plate is announced. In order to receive a prize, the winner must arrive in the vehicle whose license plate was announced and with the WKMX higher Click window sticker still attached. A valid offwers license and registration card must be shown. The direct must either be the registered owner of the vehicle, have the same last name as the registered owner or have a letter signed by the registered owner. giving the driver permission to use the vehicle. Prize recipient must sign a release and receipt to receive the \$106,70 prize. A full name and address must be provided for entry into the grand prize drawing.

EINCIBILITY: Subject to state laws, contest is open to all legal U.S. residents who are legally licensed to drive in the State of Alabama except employees and their immediate families of WKMX, Inc., Duntap and Associates, Inc. or the U.S. Department of Transportation, Alaional Highway Traffic Satety Administration, their advertising agencies and consultants. No purchase excessary. No substitution of prizes except by WKMXC, Limit one daily price (\$106.70) per terminy (I.R.S. definition). All federal, state and local taxes, fees and expenses, if any, are the responsibility of the winner. All winners must clear price in person. Minors must be accompanied by a parent or legal guardian. Winners must present proof of identification including both a valid driver's license and a social security number and sign affidavit and resease. All winners acknowledge that WKMX has the right to publicize and/or broadcast name, character, likeness, voice, and matter incident to comtest without compensation. WKMX, finc, Duntap and Associates, Inc., and the U.S. Department of Transportation, National Highway Traffic Satety Administration, their officers, agents, and employees disciplinary ersponsibility for personal or properly companies may not of this contest or thereafter. Decision of contest operators and judges is final. Void where prohibited. WKMX reserves the right to change or modify contest rules and around maximing date after appropriate announcement on WKMX, radio at least 24 hours prior to changes taking effect. Contest dates may be changed it necessary without prior protocol. This contest is a joint promotion of WKMX, Duntap and Associates, inc. and the U.S. Department of Transportation, National Highway Traffic Sately Administration with all rights reserved.

WKMX Responsibilities:

WKMX was the "official" promoter of the contest. WKMX enlisted the support of its major advertisers as co-sponsors. In addition, WKMX:

- Undertook creative development of scripts, transcriptions and instructions for on-air personalities to announce the contest, present the safety belt messages, encourage safety belt use, announce winners and promote the grand prize drawing.
- Ran spot announcements and encourage on-air personalities to use safety belt and contest materials as often as possible.
- Included the program tag line and sound effects with station IDs and personality sign ons/offs.
- Provided photographs of on-air personalities for the poster.
- Validated winners and made payments.

- Recruited merchants to support the program including the distribution of stickers and the possible provision of additional prizes for winners or premiums for entrants.
- "Hosted" the grand prize event including selecting and securing a place for the drawing and selecting and recruiting an appropriate official to draw the prize.
- Collected survey data by obtaining the cooperation of one or more retailers and distributing and retrieving a questionnaire.

Dunlap and Associates, Inc. Responsibilities:

As project producers, Dunlap:

- Prepared and reproduced or assisted in the preparation of all window stickers, posters and point of distribution displays.
- Provided WKMX with safety belt information and message themes and assisted WKMX in generating copy and spot announcements on the contest and on safety belt encouragement
- Provided WKMX with a sound effects tape of safety belt buckle and unbuckle sounds.
- Designed the system to select winners and provided WKMX with specific dates and times for selecting license plates as well as written observation instructions.
- Provided \$5274.70 in prize money (40 prizes @\$106.70 and 1 prize @\$1006.70).
- Provided WKMX with a minimum of 50,000 window stickers for the contest using a mutually agreeable design.
- Provided WKMX with a minimum of 200 posters to support the contest using photographs supplied by WKMX and in a mutually agreed upon design.
- Evaluated the program including measuring safety belt use and designing and analyzing any surveys to be collected by WKMX.
- Provided WKMX with feedback on evaluation results as desired by WKMX.

APPENDIX C

FOCUS GROUP PROTOCOL AND FORMS

INTRODUCTION

Focus groups were the primary data collection mechanism used in the follow-up data collection as detailed in Section VII of the report. This Appendix presents the detailed plans and protocol for conducting these focus groups and the various forms used in their implementation.

Focus Group Descriptions and Contact Protocol

Descriptions

Group Designator	Description		
A1,A2	16-24 year old male <i>civilians</i> selected from among those people who signed the pledges. (2 groups)		
В	16-24 year old female civilians selected from among those people who signed the pledges.		
C1,C2	16-24 year old male <i>civilians</i> who did not sign the pledge and participate in the contest but knew about it. (2 groups)		
D	16-24 year old enlisted males at Ft. Rucker (to be recruited by the Army)		
E	"All other" ages and sexes with a target mix of:		
	• One female <i>civilian</i> less than or equal to 25 years of age who signed the pledge		
	• One female civilian less than or equal to 25 years of age who did not sign the pledge		
	• One female civilian over 25 years of age who signed the pledge		
	• One female civilian over 25 years of age who did not sign the pledge		
	• Two male civilians 25 years of age or older who signed the pledge		
	• Two male civilians 25 years of age or older who did not sign the pledge		

Schedule

Monday, June 18, 1990

Dunlap staff arrives in Dothan. Meet with site coordinator and Army liaison who is to provide focus group meeting room. Check out room.

Tuesday, June 19, 1990

Daytime (exact time to be determined) - Group D

4:00-4:30

Group A1, A2, B, C1 or C2

8:00-8:30

Group E

Wednesday, June 20, 1990

4:00-4:30

Group A1, A2, B, C1 or C2

8:00-8:30

Group A1, A2, B, C1 or C2

Thursday, June 21, 1990

4:00-4:30

Group A1, A2, B, C1 or C2

8:00-8:30

Group A1, A2, B, C1 or C2

Friday, June 22, 1990

Any additional groups needed or identified.

Contact Protocol

When contacting the groups, indicate that WKMX has asked us to follow up on its recent Make It Click! contest. If asked about WKMX, we are a research company working with them and:

• Since they signed the pledge, we are interested in their reactions (pledge groups)

or

- We are interested in their reactions (non pledge groups) if:
 - They know about the program. Ask them to describe it briefly. If they mention pledges, stickers and/or seat belts, they qualify.
 - If they qualify, ask if they signed the pledge and entered the contest. If yes, either move them to a pledge group (if there is an opening) or thank them and stop.
- Are they a licensed driver? If no, do not include.
- Do they regularly (at least once a week) drive a car, truck or van? If no, do not include. If yes, invite them to a session and offer them \$25. If they agree, ask:

- Age
- Sex (if not sure)
- Vehicle type used most
- Send a reminder note including:
 - ✓ Your name, address and phone
 - ✓ A reminder to call you if by any chance they cannot show since their participation is critical
 - ✓ Directions to the meeting place
 - ✓ A specific time, day of the week and date.

Discussion Group Confirmation Form

Name:				
Address:				
Telephone:				
Day:				
Date: June	, 1990			
Time:				
Place:				

We thank you for agreeing to come to our discussion group and give us your thoughts. As mentioned, we will pay you \$25 for helping us. Because these groups are made up of selected people, it is vitally important that everyone who has agreed to come actually shows up. If there is any problem, please contact:

Annette Swan (205) 598-6165

as soon as possible so that we can try to find a replacement.

Group Composition Form

Group Designation:							
Group Characteristics:							
	Civilian: Mi	ilitary:					
	Age: 16-24 All of	thers					
	Sex: all male mi	xed	* *				
••	Pledge: yes no.		6 :				
Date:	June, 1990						
Time:							
	Name	Telephone	Age	Sex P	ledge?		
1.			· · · · · · · · · · · · · · · · · · ·				
2.							
3.	,						
4.							
5.			:				
6.			: 1				
7.							
8.							
9.							
10.			. ;				

Focus Group Topics

- I. Who are they? (very briefly)
 - Age
 - Number of years licensed
 - Number of children, marital status, employment (just a cursory review)
 - Are they a pilot? Married to a pilot?

II. Vehicle Use

- Type of car/truck driven most often
- Annual mileage
- Types of driving, e.g., highway, long trip, short trip

III. Belt Use Behavior

- Do they use now? If yes, how often? Under what circumstances?
- If not, why not?
- Did they ever use, e.g., in a different vehicle?
- Do their friends use? Their family? Their spouses/girlfriends/boyfriends?
- Do they use off-base as well as on-base? (military and dependents)

IV. Attitudes Toward Belt Use

- Do they think belt use improves safety (reduces risk)? If so why? If not, why not?
- What "image" do they think buckling up conveys? To the world? To peers? To children?
- What percentage of all drivers in the Dothan area do they think buckle up? What percentage of their peer group?

V. Seat Belt Laws

• Do they know the legal status of belt laws in Alabama (and on base if it is a Ft. Rucker group)?

- If the consensus is that there is no law, would they buckle up if a law were passed?
- What is their opinion of seat belt laws? Child restraint laws?

VI. Motivations

- What has (or would) motivate them to buckle up?
- What's the biggest turn-off to them from safety promotions?
- What motivations do they think would get others to buckle up?
- Do they feel a compelling need to be safe? In a car?
- Do they have a desire to be in control? In a car?

VII. Involvement with WKMX

- Do they listen to WKMX?
 - If yes, How much? When? Where (e.g., in car)? To whom?
 - If no, why not? Did they ever?
- Do they participate in the WKMX contests and promotions?

VIII. The Make It Click! Campaign

- Did they use before Make It Click!? If yes, how often? Under what circumstances?
- Did they actually hear the *Make It Click!* Campaign? If no, how did they hear about it? [Note: If some had not heard about the campaign, describe it before going on.]
 - What did it say? What was their response (e.g., got sticker, ignored it)?
 - Probe recall of contest format and prize money
 - Probe the recall of click sounds; personal appeals from disk jockeys; control message; other safety message
 - Did they hear any daily winner announced? The grand prize drawing?
 - Did they use belts after the campaign?
- The stickers:
 - Did they know about the sticker as part of the contest?
 - Did they know how and where to get one?

- How to use it to enter the contest?
- Did they see the sticker? If yes, did they get one and where? If not, show the sticker.
- Did they know that the sticker was designed for the rear window?
- Would they (or did they) place this sticker on the rear window of their car?
 - If not, why not? Would they have used the sticker if they knew it was meant for the window rather than the bumper? If it were some other more temporary materials, e.g., a ribbon? If it were done in fluorescent colors?
 - ✓ Did they have enough time to get a sticker?
- The T-shirts
- The prizes
 - Were there enough prizes to interest them in entering?
 - Were the prizes large enough? The daily prize? The grand prize?
 - Did they think they had a fair chance to win?

IX. Suggestions for Future Programs

- Can a contest like this work? If yes, how?
- Other ways to get to the target group
- What sort of response can we reasonably expect?

APPENDIX D

INDIVIDUAL FOCUS GROUP NARRATIVE REPORTS

INTRODUCTION

This Appendix contains the detailed reports of the focus groups conducted as the main part of the follow-up evaluation. These reports are not a complete transcript of what was said by the various participants. They are, however, a detailed account of the points made by the participants without interpretation or commentary by the project staff.

The specific groups conducted are identified as follows:

Group Designator	Description
A-1 A-2	16-24 year old, male civilians who did sign the pledge to buckle up
В	16-24 year old, female civilians who did sign the pledge to buckle up
C-1 C-2	16-24 year old, male civilians who did not sign the pledge to buckle up
D	16-24 year old male Army personnel
Е	Over 25, male and female with military association, half signed pledge, half did not
F	Over 25, male and female civilians, did not pledge

Each report consists of a summary of the major points made by the group followed by detailed results of the ideas presented.

SUMMARY FOCUS GROUP A-1

This group was composed of six young males ages 16-21. All had signed pledge forms and three of the group came from military families. Although all the participants are regular users of safety belts, only half said that their families were regular wearers too and that most of their friends were nonwearers. It should be noted that the participants in these focus groups were selected at random from the pledge cards and all those willing to meet with us were scheduled until the focus group sample was complete. One of the participants in this group was the son of a winner of two prizes in the contest, including the grand prize.

All members of the group believed that wearing a belt reduces the risk in a car. They felt that they convey an image of safety and set a good example to children. Most of the group felt that seat belt use in the area is low. Only two members put the numbers as high as 50-60%.

Group members were not aware of the status of the Alabama law with regard to safety belts although they believed that there is a law for young children. They all felt that more people would wear belts if a law was enacted in Alabama, although they felt that such a law would be hard to enforce.

Members of the group variously attribute their use of belts to parental influence, driver education programs and/or a belief that wearing a belt reduces the risk of injury in an accident. One of the group said that the *Make It Click!* campaign persuaded him to start wearing his again after he had ceased to wear it. Some participants said that many of their friends don't wear belts because they don't believe that an accident is going to happen to them. One participant said that some of his family members still refuse to buckle up even though a family member was involved in a serious accident.

When asked for ideas on how to motivate people to wear belts, two of the participants said that the *Make It Click!* campaign had influenced their parents to begin wearing belts and some agreed that this type of contest influences people to buckle up. They also felt that insurance companies might encourage people to wear belts if they gave monetary benefits to those who buckled up or penalized those who are in accidents and found not to be wearing belts.

All members of the group listen to WKMX on a regular basis. They were very familiar with the *Make It Click!* contest and all had signed pledge cards. However, two of the six did not put stickers on their cars and were therefore ineligible to win a prize. One said that he felt the contest was too much work and the other said that he thought his chances to win were too low to bother with the sticker.

The group agreed that the contest was complicated and would have preferred a simpler approach. They suggested that the van should have pulled over cars which bore a sticker and a buckled driver and a prize awarded on the spot. They also would have liked to have received the material in the mail so that they wouldn't have to go anywhere to pick it up.

They felt that high schools should do more to promote belt use among students and cited examples of schools organizing mock car accidents outside the school to impress students with the need to wear belts. They all like the Department of Transportation dummies, Vince and Larry, which they have seen on TV and felt that they should be used more. They also thought the radio

should have more commercials on belt use and that teenagers might be influenced by teenage idols promoting seat belt use. Finally, they thought that as girls tend to wear belts more that they could be instrumental in persuading boys to wear belts.

In conclusion, although five of the participants were regular users of belts prior to the contest, the campaign was successful in influencing the sixth member, as well as some of the parents, to acquire the habit of safety belt use.

DETAILED RESULTS: FOCUS GROUP A-1

Participant Characteristics:

Six males ages 16-21. All signed pledges. Four of the six come from military families.

Belt Use

- We use belts always. (All)
- We have worn belts since we were in high school. (All)
- Our families wear belts. (3)
- My family does not.
- Very few of our friends wear belts. (Most)
- Most of my friends wear them.
- We are all students and our friends are students.

Attitudes Toward Belt Use

- We believe that wearing a belt reduces the risk in a car. That is why we wear belts. (All)
- The image we convey is a concern for our own safety and the safety of others.
- We set a good example to children.
- A very low percentage of drivers in the area wear belts. I see kids standing up in the
 back seat of the car all the time. Even standing on the front seat sometimes. I
 would say four out of ten use them.
- I think use is pretty high-50-60%. (2)

Belt Law

- We don't know what the Alabama law is with regard to seat belts.
- I know there is a law for young children to be in seats.
- If there was a law people would buckle up more. (All)
- We think a law would be a good idea. (All)
- It is hard to enforce such a law.
- They would have to give fines of \$50-\$60.
- That would discourage people from not wearing them.
- I have four nieces and two nephews and none of them are restrained. I have talked to my brother and sister and it doesn't do any good. I don't know what else to say to them. I make the children wear them in my car.

Motivations

- I wear it because if I get in a wreck you don't get hurt.
- Seeing wrecks did it for me.
- I started to wear it at 16 because it was the law.
- My mother made me wear mine.
- Driver ed told me I should wear it and a couple of friends always did so I did too.
- We took driver ed at school. (All)
- I feel comfortable with my belt on in my own car but in other cars with bench seats I don't wear it. In bucket seats I feel more like in a cockpit.
- The chance of winning money on *Make It Click!* did it for me.
- I used to when we lived in Florida because it was the law. Then I stopped. But I started again when the *Make It Click!* campaign started and it became a habit again.
- I think the Make It Click! campaign was a good idea.
- I think campaigns like *Make It Click!* are the most effective way. Give people money for buckling up.

- I know quite a few people that started to wear belts because of the *Make It Click!* campaign. My mother and father both started to wear them and are still wearing them.
- My mother started to wear hers too. She wore it because she thought she could win. She did too. She won twice. She still wears her belt.
- Our friends don't wear them because they don't think an accident is going to happen to them.
- My cousin was killed in January and she wasn't wearing her belt and still most of my family don't wear their belts even though I talk to them about it. My brother and I are the only ones who wear belts. I ask them to wear them when they ride in my car.
- I think seminars showing films of the results of not wearing belts might convince our friends to wear they. Like in driver ed.
- They do that in driver ed and still people don't wear belts.
- It would also help if the insurance companies could find a way to give benefits to those who wear belts.
- If you were in wreck without a belt on there could be a penalty if you weren't wearing it. Like not paying you for the accident.
- Those two dummies on TV are great. They have a bit of humor but they make people think more.
- I think I have influenced people into wearing belts.
- I know I influenced my little brother.
- I try to get my Dad to wear his but he always says: "Do as I say not as I do."
- Yes, definitely, we need to feel safe in a car--definitely. (All)
- We all need to feel in control. Seat belts help you feel in control. (All)
- Yes, we feel safer when wearing a belt. (All)

Involvement with WKMX

- We all listen to WKMX.
- Not all the time.

- We listen at work and at night.
- We mostly listen in the car. (Most)

The Make It Click! Campaign

- We all participated in the contest.
- We heard it announced very often. (All)
- You had to get a sticker and put it on your car and wear a seat belt. (All)
- You pledged to wear your belt all the time.
- If WKMX saw you they would write down your license place number and call it over the radio.
- We put the sticker on our car. (4)
- We didn't. (2)
- We put our sticker on the window.
- I put it on the bumper.
- I didn't because it sounded too complicated. They had to see you and call your license plate number and it cuts down your chances of winning.
- When I signed the pledge I thought it was simple but then found out it was more complicated.
- I thought the odds of winning were against me but I put on the sticker anyway.
- My Mom signed me up but I didn't put on the sticker as I wear my belt anyway.
- We heard it on the radio and then went to McDonald's.
- We picked up the materials at McDonald's.
- My sister brought it home for me. Her teacher brought in a bunch.
- The prize was \$106.60. But first they had to call you license plate number.
- There was a grand prize on Saturday of \$1,006.
- My Mom won that. She won the grand prize and a regular prize. I was listening and told my Mom to call in. Then on Saturday, I heard the grand prize announced.

- We all listened for the license plate numbers.
- I saw t-shirts on sale at the department store.
- We didn't see anyone wearing them.
- We would have liked to have had one.
- We remember B.J. Kelley. We like the way he does commercials.
- The radio station just emphasized that you should wear a belt and then they went into details about how to enter the contest. They made the sound of buckling up.
- We liked the "click, click," sound.
- The prize money was enough.

Suggestions for Future Programs

- I think it would have been better if the van had pulled cars over and given a prize on the spot. It sounds as if you would have had a better chance to win.
- On-the-spot winning is better. (All)
- You could send stickers out through the mail. People are more likely to enter if they don't have to go anywhere to pick them up.
- I think if you want to make people wear belts you should show them films of what really happens in a wreck if you don't wear a belt.
- My friend told me about a mock wreck they put outside her school. They didn't tell anyone that it wasn't a real wreck. They had the ambulances there and everything and the kids were shocked. Afterwards they told them it was a mock drill. Apparently, it really made an impact and this girl started to wear her belt after that.
- My high school did that just before graduation.
- The schools don't do enough--they could do a lot more. There is nothing except driver ed.
- I tell everyone, wear your belt or you don't drive with me.
- Girls tend to wear them more.
- If you had a program directed towards girls, may be they could persuade their boyfriends to wear them.
- More commercials with the dummies might help.

- Seeing little kids unbuckled really gets to me. They should put a little dummy in with the big dummies to show people what can happen to little children.
- More radio commercials would be good because people usually listen in the car.
- Getting some teenage idol to promote the use of belts might help.

SUMMARY FOCUS GROUP A-2

This group was composed of eight young males ages 16-24. All had signed pledge forms. Three of the group were associated with the military. There were five regular users, two part-time users and one nonuser of safety belts.

Most of the group believed that wearing belts reduces the risk of injury but they thought that area use was only between 25-50%. Most of the participants did not think that Alabama had a seat belt law, and they felt that more people would wear belts if such a law was in effect. However, they also said that in order for the law to be effective, it would need enforcement similar to the way it is enforced in the military. One person noted that in Florida, where there is a law, he did not wear his belt, and it was pointed out that there is a 55 mph speed law in most states which most people do not obey. One person said he feels strongly that children should be restrained but felt that adults should make their own decisions about belt use.

The belt users cited parental or military influence, force of habit and personal experience of an accident for their use of belts. Belt discomfort and forgetfulness, appear to be the reasons that two of the participants only wear a belt sometimes. One part-time user said that he also wears it when there is a lot of traffic. The nonuser feels that he can avoid accidents because he is a good driver and he also expressed concern about the possibility of an accident occurring in which he could not free himself from his restraint.

Members of the group thought that a lot of nonusers trust their own driving and don't think they will be involved in an accident. Group members said that they had no ideas how to get the young male to wear a belt. They said that at their age, parents can no longer influence their behavior and that children should be educated about seat belt use at an early age.

Most of the group listen to WKMX on a regular basis and all listen sometimes, especially when driving. They were familiar with the *Make It Click!* campaign and went so far as to sign pledges. However, four of the group admitted that they did not follow through by putting a sticker on their car. They dislike the idea of putting a sticker on their car as they feel it de-values the automobile. They heard the license plate numbers called out on a regular basis and they thought the prizes were attractive.

Some members suggested that this type of contest might appeal more to older people. They thought more people their own age might have entered if it had been less work--for example, if the materials had been mailed to them and all they had to do was to return a postcard and wear a ribbon on the antenna of their car instead of a sticker.

This group did not have any new suggestions for other ways we might encourage the young male to use safety belts. They did not think that scare tactics would work. They like the idea of programs directed towards parents to get children into the habit of wearing belts. They also felt that programs directed towards girls their own age to encourage their male friends to wear belts, might have some merit.

In summary, most of this group used belts before hearing of the *Make It Click!* campaign. However, they were very interested in the discussion and provided some insights into ways that future campaign could be improved.

DETAILED RESULTS: FOCUS GROUP A-2

Participant Characteristics:

Eight young males ages 17-24. All signed pledges. Three of the eight are military or come from military families.

Belt Use

- We are all regular users of belts. (5)
- We use belts sometimes. (2)
- I never wear a belt except as a passenger.
- Two of our families do not wear belts.
- Fifty percent of our friends wear them. (2)
- Seventy percent of mine wear them.
- Eighty-five percent of mine wear them.
- Ninety percent of mine wear them.
- None of my friends wear them.

Attitudes Toward Belt Use

- We believe wearing belts reduces the risk of injury. (5)
- I don't care what image I portray. If I get in an accident, I don't want to hit the window.
- We believe the area belt use is between 25-50%.

Belt Law

- We think they recently passed a belt law in Alabama. (2)
- We don't think there is a law in Alabama. (6)
- I think more people would buckle up if there were a law.
- Yes if there was enforcement and, say, \$50 fine. (2)

- Enforcement of a seat belt law would motivate people to wear them. Enforcement works on the post. You have to be able to pull them over for not wearing a belt, though.
- I never buckled up in Florida where there was a law. I did on the post because they check you.
- In Florida they don't pull you over for not wearing a belt. They have to stop you for something else before they can give you a ticket for nonuse. I think the ticket is \$25 plus your other violations.
- 55 mph is a law but how many people do you see obeying it?
- I feel strongly about kids being buckled up.

Motivations

- I have only worn mine constantly for 2 years. I lived in Florida where there is a state law but that didn't make me wear it. Although the Army requires me to wear it on post I only started to wear it regularly when my wife was in an accident and wouldn't have been hurt if she had been wearing a belt.
- We have always worn it. Our parents who are in the military made us. (2)
- I like the idea of air bags. I've only worn my belt 2 years but now I am an avid believer, however, I don't tell others to wear them if I'm riding with them.
- I have gone to a couple of defensive driving courses and while you are there you think about wearing them and after its over you forget.
- I only wear it sometimes. If a friend drives and he puts his on then I do also.
- I only put it on when I feel like it. I put it on back roads when there is a lot of traffic but I never put it on the highway.
- I only put it on when it is required by law or if I am in a car with a poor driver. I trust my own driving.
- I just forget to wear it sometimes.
- Mine is uncomfortable. It irritates my neck and that is why I sometimes don't wear it.
- One reason I don't wear mine is I worry about what happens if I was in a wreck and couldn't get unbuckled.
- Another reason I don't wear my belt because I trust my driving but not the driving of others.

- We took driver education. (All)
- I think some people don't wear them because they feel belts get in their way. Some just don't think about it.
- A lot of nonusers say they trust their own driving and don't think they are going to have an accident.
- The only ones who drive with me that I insist they buckle up are my sister's kids. Other than that, I believe that adults should make up their own minds.
- Parents can't make their kids wear them.
- I think if you are raised doing it then you will continue to wear it.
- May be a program should be directed towards parents.
- At our age parents cannot tell us what to do.
- You have to start when the kids are young.
- We have no ideas how you can get the 16-24 year old male to buckle up.
- You just have to keep at them and keep them aware of the problem.
- Scare tactics won't work. They do that with drugs and people still use drugs.
- People our age might wear belts if our girlfriends said they wouldn't drive with us unless we buckled up.
- I wouldn't. Before I got married I would have taken a walk.
- I don't think about safety in a car. I just think about being careful to avoid an accident. I sit up high and make sure I can see through the mirrors.
- I feel more in control of a car when I am wearing a belt, especially when turning corners fast.
- It doesn't make me feel more in control. (Sometime user)
- I have more of a problem with the comfort of the belt.

Involvement with WKMX

- We listen regularly to WKMX. (5)
- We listen sometimes.

- That's all I can pick up in my car.
- We all mostly listen in the car.
- We participate in their contests. (7)

The Make It Click! Campaign

- We all heard Make It Click! (7)
- I don't remember.
- It was a campaign to make people wear belts.
- You had to get a bumper sticker and wear a belt and they would pull you over and give you a prize.
- You had to get a sticker at McDonald's.
- Every so often they would announce the owner of a vehicle who was wearing a seat belt.
- I remember it now.
- The prize was \$106.
- We don't remember other prizes.
- We all signed pledges.
- We didn't put the sticker on. (4)
- I didn't think to do it.
- Putting stickers on cars takes value off your car.
- I didn't like the sticker, I would have put something on my antenna.
- May be a window decal would have been better.
- We didn't know you could win \$1,006.70 for a grand prize.
- We remember Make It Click!.
- No disk jockey stood out.
- We heard winners announced sometimes.
- I heard the tag numbers being called out.

- It was a regular thing hearing them call out tag numbers.
- I didn't hear the grand prize announced.
- They had t-shirts also.
- They were selling them at the local department store.

Suggestions for Future Campaigns

- More money wouldn't have made a difference in encouraging me to put the sticker on my car. I just don't think there is much chance in winning.
- A \$500 prize wouldn't have encouraged me much.
- The contest might appeal to older people more than younger people.
- You might have had more people enter if the contest was run year round.
- It would be better if you received the material in the mail so that you don't have to go and pick it up.
- We probably would mail back a postcard if all we had to do was do that and put a ribbon or something on our antenna.
- Maybe you should direct programs towards parents so they will start to teach their children at an early age.
- Programs directed towards young girls to make them persuade their male friends to wear them might work.

SUMMARY FOCUS GROUP B

This group was composed of eight females ages 16-20. All had signed pledge cards. These young women were rather self-conscious and shy, but eventually became more at ease. All but two of the participants said they wear their belts regularly. These two people said they only wore their belts sometimes. Half of the group said that their parents wore belts and half said that their parents do not. They also said that most of the friends do not wear belts.

They all agreed that wearing a belt makes you safer. The belt users said that their friends don't care if they wear belts or not and that they do not project a "wimpy" image. Estimates of area use ranged from 25% to over 50%. They also agreed that Alabama does not have a seat belt law and they felt that more people would wear them if there was a law. They did know that there is a child restraint law in Alabama but they weren't sure of the age to which it is applied.

Two participants said that they started to wear a belt because of the Make It Click! campaign and several noted that wearing a belt became more of a habit as a result of this campaign because it reminded them to put it on. One participant said that her reason for wearing a belt was because of a serious accident to a school friend. However, she noted this accident did not influence many of her other school friends to begin wearing belts. Driver ed programs, boyfriends, and driving a car with automatic safety belts also had an influence on promoting the use of belts among this group.

Group members said that the majority of their friends do not wear belts because they are lazy. They noted that a lot of people don't think that an accident is ever going to happen to them. They also mentioned that some people believe that wearing a belt can be dangerous and cited an example of an accident in which a car becomes submerged in water.

All of the group are regular listeners of the WKMX radio station and they were all familiar with, and had participated in, the *Make It Click!* contest. Again, they cited laziness as the factor in the low participation of their friends in this contest.

They all considered the contest to be a success and some said that it had positively influenced their belt use. They did not have too many ideas about other ways to influence belt use although they felt more commercials might help, especially if they provided education to combat the belief that wearing a belt can be dangerous.

When asked to comment on the idea suggested in previous groups that belt campaigns be directed towards young females, like themselves, who, in turn could persuade their young male companions to wear belts, their response was not too encouraging. They expressed insecurities about their abilities to influence their boyfriends, and although they generally said it might work, they did not say it convincingly.

In summary, although this group was not able to contribute new ideas to promoting seat belt use, they were examples of the types of individuals that were successfully reached by the *Make It Click!*, campaign and, to some extent, the campaign had some influence on their seat belt habits.

DETAILED RESULTS: FOCUS GROUP B

Participant Characteristics:

Eight females ages 16 to 20. All signed pledge cards.

Belt Use Behavior

- We wear our belt (6)
- We wear our belt sometimes (2)
- I usually wear it just on highways.
- I have been wearing mine for four months.
- I have worn mine for three years.
- Only about 5% of our friends wear belts. (Several)
- Not many of our friends wear them. (All)
- Our parents wear belts. (4)
- Our parents don't wear them. (4)
- My mother doesn't.

Attitudes Toward Belt Use

- We think that wearing a belt makes you safer. (All)
- Wearing a belt lessens the chance of you going through the windshield.
- Our friends don't care if we wear belts. There is no bad image. People don't think we are "wimpy."
- We think the area use of belt is between 25-50%. (Several)
- We think it is over 50%. (3)

Belt Laws

- I don't think that Alabama has a law.
- There is no belt law in Alabama. (All)
- We think more people would buckle up if there was a law.
- There is a law for children under 12.
- We think it is for children 3 or 4.

Motivations

- I have been wearing mine four months, since a friend died in a car wreck.
- I have worn mine for three years—I started to wear it because of driver ed. Then I quit for a while but then all the commercials about how much safer it is made me start to wear it again.
- I began to drive a car with automatic seat belts and it became a habit.
- It is a habit with me.
- My boyfriend makes me wear mine.
- The contest made us wear our belts more than we used to. (2)
- Wearing the belt became more of a habit during the contest. (Several)
- Seeing the stickers or hearing "click, click," reminded me to put it on.
- It is not so much that I don't want to wear a belt, its just that I need reminders to wear it.
- We who only wear our belts some of the time wore them all the time when the contest was on.
- My mother doesn't wear hers because it wrinkles her clothes.
- Our friends don't wear belts because they are lazy.
- They don't have to wear the belt so they don't.
- We don't think that hearing of accidents would make our friends wear a belt. They might wear it if a law was passed and it was enforced.
- If close friends are in accidents, that might persuade them.

- Some of my friends were also friends of the person who died in an accident and they still don't wear them.
- Belt use might have gone up a little bit at school after the accident.
- People don't think it is ever going to happen to them. (All)
- After the accident the school did not put in any programs promoting belt use.
- The only program we have at school is driver ed. They make you wear your belt. But driver ed is not required. Some people take off their belt after they leave the school.
- Some people think that you are liable to get more hurt in an accident if you are wearing a belt. (Several)
- Say you go into the water and you can't get your belt off, you drown. That happened to another girl at our school.
- I do have a desire to be in control of the car. I don't want anyone else driving.
- Seat belts make me feel more in control.
- The message that wearing seat belts because they keep you more in control of the car is a good message.

Involvement with WKMX

- We listen to WKMX. (All)
- We listen to it in the car. (All)
- We sometimes listen to it at home. (All)
- We enter WKMX contests. (All)
- We all listen to the birthday contest but we haven't won.

The Make It Click! Campaign

- We heard about the contest.
- If you had a bumper sticker, wore a seat belt and they called your tag number, you would win. We remember that. (All)
- The prize was \$106.

- The prizes were big enough.
- There were Make It Click! t-shirts.
- We didn't know how to get a t-shirt.
- They were selling them at the local department store.
- We mostly got our pledges from McDonald's.
- We got ours from the local department store. (2)
- We can't remember the safety message.
- All they said was "Click, click." Nothing else.
- I heard them say "Click, click, buckle up when you are in your car."
- We know they were trying to get people to wear belts.
- We heard the winner announced once in a while. Not very often, may be once or twice a week.
- We didn't hear the grand prize drawing.
- We put stickers on our cars. (All but one)
- When I went to McDonald's they only had the pledge cards no stickers. I didn't get a sticker.
- We put the sticker on our window. (3)
- We put ours on the bumper. (4)
- We all read the instructions on the back.
- Just a few of our friends entered the contest.
- Others knew about it but were too lazy to stop by and pick up the materials.
- We thought there was a chance we could win.

Suggestions for Future Programs

• More commercials might encourage belt use.

- Let people know that the type of accidents like drowning in water being unable to get your belt off, only happens a small amount of the time. That might help people who think that way.
- Contests might help if they were run at school but people might stop wearing them after the contest was over. At least they would wear them for a small amount of time.
- I don't know whether we could persuade our boyfriends to buckle up.
- If I said I won't drive with you unless you buckle up he might say, fine, get out of the car.
- I tell my boyfriend I won't drive with him unless he wears his belt and he does.
- My boyfriend didn't when I tried that.
- It depends on how much the boy likes you and how much control you have over him.
- It might work.

SUMMARY FOCUS GROUP C-1

This group was composed of 10 young males ages 16-20. None had signed the pledge form. As a group, they were very interested in the discussion and provided some insights into peer behavior. Almost all of them were regular belt users--there were two part-time users and only one nonuser. Half of the group come from the military and said that their family members wear belts but that about half of their friends do not.

All of those who wore belts said that belts made them feel safer. They said that although all of the military on the post wear belts, they estimated that use in the local area is only about 25%.

All members of the group knew that there is no belt law in Alabama and were not optimistic that a belt law would increase use. They feel that people resent being made to do some and that a law would have a negative effect on present users of belts. They feel strongly about the need for young children to be in seats and did not understand why there is not more police enforcement of the child restraint law.

They attributed their belt use to their parents insistence and/or personal experience, or the experience of friends, of accidents. The nonuser said that he does not like the feeling of being restricted to a vehicle. He said that if he had an automatic seat belt, however, he would use it. All agreed that the reason at least half of their friends don't wear belts is because they don't think that it is "cool."

They felt the police set a poor example when it comes to using belts. They saw no benefit to the use of scare tactics to promote use as they feel their peers see so much violence on television it would be ineffective. They said that perhaps parents could use their influence to increase use among young people. They also felt that money is a good motivating factor and that insurance companies should have a lower deductible for belt users or not pay on an accident if people are not wearing a belt. They noted that this system works for the military in promoting seat belt use.

They all listened to WKMX and were somewhat familiar with the contest. They cite laziness as the reason why they and many of their peers did not enter the contest. They thought there were too many things to do and the materials were not easily available to them. Apparently, McDonald's is not the "in" place to go and Burger King or Hardee's is where the young people hang out. They had no problem with putting stickers on a car although it was noted that they can be hard to get off and are better taped to the window. However, most did not know where to obtain the Buckle Up sticker.

Finally, in discussing ideas for future programs, the group said that they liked a McDonald's campaign which gave people a dollar when they went through the drive-in belted. McDonald's alternated sites and times to make these awards. They liked the simplicity of this campaign and said that if contests are going to be run to promote seat belt use they want them to be easier and less time consuming. They felt that the *Make It Click!* campaign could have been more successful had it been easier to enter and the materials had been more readily available.

DETAILED RESULTS: FOCUS GROUP C-1

Participant Characteristics:

Ten males, ages 16-20. None had signed a pledge form. Five of the ten came from military families.

Belt Use

- We all wear belts. (7)
- We only wear our belts sometimes. (2)
- I do not wear a belt.
- I wear mine under hazardous conditions.
- We wear our belts but our families do not. (3 or 4)
- My girl friend doesn't wear it but I make her when she is in my car.
- Most of my friends don't wear belts.
- We would say that 50% of our friends wear them.
- The girls wear them less than the boys and they drive very fast.
- Most of my friends wear a belt because we were all in the same wreck.
- My friend got in a wreck and still doesn't wear a belt.

Attitudes Toward Belt Use

- We all feel safer wearing a belt.
- We think that less than 25% of the people in the local area wear belts. (All)
- All the military on post wear them.

Belt Laws

- There is no belt law in Alabama. (All)
- If there was a law they would only buckle up when the cops were around.

- It would be worse. People who wear them now would take them off because they would feel that are being forced to wear them.
- People resent being made to wear them.
- If you tell them they have to they won't.
- We wouldn't stop wearing ours if there was a law. We are used to it and it feels safer.
- I saw someone today with a kid on her lap. It always annoys the heck out of me when I see that. If the car stopped the woman would squash the child.
- You are required to keep kids in seats.
- I don't know why the police don't pick up people who have young kids loose in the car.
- It drives me nuts to see young kids crawling around the back window.
- Hospitals require seats for infants before you can take the child home.
- Back when no one thought much about seat belts, my little sister went from the back seat to the front when my Dad had to stop real quick. She had to get stitched up. I was 8 at the time and it spooked me.

Motivations

- I guess our friends think it is not cool to wear a belt.
- A lot of our friends feel that way.
- We all wear belts because of our parents make us. (Several)
- I was in an accident so I wear it now.
- I don't put it on for short trips.
- I don't wear it because I don't like feeling restricted to a vehicle.
- I don't think a belt is uncomfortable. I got used to it.
- We were in an accident in South Carolina. It scared me to death and I just started to wear a belt.
- I was in a wreck one time, the only time I didn't wear a belt. I was loaded and fell asleep in the car. My friend took off and hit a telephone pole and I went through the windshield. I paid for not wearing that belt.

- I was in an accident at 30 mph. You don't realize that sometimes you can't stop yourself but at 30 mph you can stop yourself so it didn't make me wear my belt.
- There is a lot of force in a wreck sometimes.
- Perhaps you could have people who were in wrecks talking about them.
- My stepfather used to work on road accidents and a lot of people they had to pick up were 100' down the road.
- I remember the commercial with the state trooper saying that he never had to unbuckle a dead person.
- I remember the commercial where Mommy is holding her kid in her lap and she squishes the kid in the accident. I think they were dummies.
- I have a rule that my passenger must wear a belt.
- We think parents could motivate their kids to wear belts.
- I have to force my girl friend to wear hers.
- My friends think it is a hassle and don't want to mess with it.
- Around here you see a lot of people piling into the same truck so of course they can't wear belts.
- A lot of policemen do not wear belts and they set a poor example.
- A simulator might help--provide fake blood and everything.
- The films we saw in driver ed were so old. They were driving those archaic cars like Edsels-they weren't up to date or anything.
- I thought driver ed was kind of a waste.
- I didn't think it was a waste.
- You can't hurt kids with gruesomeness any more. Not after they have watched so much violence on TV.
- We like the dummies in the TV commercials. (All)
- I like the automatic belts better.
- If I had an automatic belt I would wear it. (Nonuser)
- I think belt users should have a lower deductible on their insurance. That might motivate people.

- How would they know that you wear it?
- That's a problem, but people either like being given money or saving it. It is a good motivation.
- They should pay for the accident if people are not wearing a belt.
- If you are in the military and you are in an accident not wearing a belt, they don't pay the costs. It doesn't matter whether it happened on post or off post.

Involvement with WKMX

- We all listen to WKMX sometime.
- I listen but not often.
- I listen mostly to tapes.
- We listen in the car on the way to work or school.
- We listen to it regularly. (3)
- We all listen to the birthday contest.

The Make It Click! Campaign

- We all knew about the campaign but we didn't enter because we are just lazy teenagers.
- The problem with the contest was that there are too many things for you to do.
- If it had been easy to get the stuff I would have tried. (3)
- I didn't have time to enter.
- I heard it and got a sticker.
- You have to be 18 to enter most of the contests.
- We don't know of any of our friends that entered the contest.
- The contest might be better for parents.
- WKMX had to see you with the sticker wearing a belt.
- I heard you had to register somewhere. McDonald's or somewhere like that.

- May be you had to get it at the radio station.
- You got the sticker at McDonald's.
- Most of us don't go to McDonald's.
- I do.
- I never have money I eat at home or at someone else's house.
- We all go to Burger King.
- Friday night is where we meet at Burger King to see where the party is. We don't eat there just buy cokes.
- Burger King or Hardee's is where you should have put the stickers.
- You could have put the stickers at school or in colleges. Not in the summer though.
- We didn't know where you got them from. (Several)
- As a matter of principle I don't put stickers on my car.
- They are too hard to get off.
- I'd put it on with tape so I could get it off easily.
- We would put stickers on our car. (3)
- A sticker on the back window is cool.
- It's an OK sticker--it's cool.
- A bumper sticker is a bumper sticker.
- A different type of sticker wouldn't have changed anything.
- We saw them on cars.
- I don't know what the prize was.
- It was \$106.
- We don't recall hearing anything about a t-shirt.
- We never saw the WKMX van--only in car lots doing promos.
- The contest is a good idea though to make people wear belts. But I am sure that after it was over they would take them off.

- No messages stand out. Messages go in one ear and out the other.
- We never heard a winner announced.
- I never heard of anyone that won.
- I heard one or two winners announced.
- They only give prizes to Dothan people anyway.

Suggestions for Future Programs

- McDonald's ran a campaign where they gave you a dollar if you drove through the drive through with your belt on. They did it at various locations at various times so you didn't know whether you were at the right place at the right time.
- We would prefer a contest that didn't make us have to do so many things.
- Make it easier for us to get the stickers and cards.
- Burger King is a better place then McDonald's.
- Parents might respond better to this than people our age.

SUMMARY GROUP C-2

This group was composed of 10 males ages 16-19. None had signed a pledge. These young men were very vocal and interested in the discussion topics. Almost all of them are regular belt users--only three said that they were part-time users. Most of their families wear belts but only about half of their friends buckled up. It should be noted that seven of the participants come from military families.

This group had positive attitudes towards belt use. They said that they knew there are certain types of accidents in which people could better off if they weren't wearing a belt, however, they said that statistically, wearing a belt reduces the risk of injury. Most felt that belt use was low in the area and estimated it to be between 25-50%.

They were all aware that Alabama does not have a belt law and questioned whether such a law is constitutional. After discussion, most came to the conclusion that Alabama would benefit from such a law and that more people would wear belts if the law was enforced.

Half of the participants said they wore belts because their families required them to, others said they wore them because of close association with people involved in accidents. They said that many of their peers do not wear belts because they don't consider it "cool." In discussing ways to motivate people to wear belts, they felt that it would be difficult to persuade their peers to wear them as people have to be self motivated. They thought that the *Make It Click!* contest was a good idea as there is a need for more public education. They suggested that insurance companies could help if they gave a rebate on premiums to those people who used belts.

The majority of the participants said that wearing a belt makes them feel safer and they always wear a belt when someone else is driving. They said that they felt more in control of the automobile when they were wearing a belt.

Participants said that they are all regular listeners of WKMX and have all participated in previous contests run by this radio station. This group had a lot to say about the Make It Click! campaign. They all knew about the contest but were not familiar with its details and did not participate in it. They all heard the slogan on the radio and they apparently knew the basics such as the need to have a sticker and wear a belt to win. Only two group members obtained a sticker and the lack of participation was attributed to the fact that the stickers were available at McDonald's which is not the "in" place to go for this group. They normally go to Burger King of Hardee's with their friends. They did not know about the need to sign a pledge, they were not aware that t-shirts were being given away nor were they aware that there was a grand prize drawing. None heard announcements of winners over the radio.

When the contest was described to them in detail, they all thought that it was a good contest. They concluded that the reason they didn't enter it was because they didn't know enough about it. They suggested that in future, contests should take place in the summer. They pointed out that during the summer they drive around more, had more free time, and listened to the radio more. They said that certainly prizes like \$106 and \$1,000 for the grand prize would motivate them to visit places where they were giving out pledges and stickers. They felt that if the Make It Click! contest had taken place when the young people were out of school many more people would have participated. They said that the materials should have wider distribution points like the shopping

malls and other fast food locations. They even suggested that the prize money could be reduced to \$10 - \$15, or even just a free t-shirt, if there were more winners. They suggested that the radio station could award these "instant" prizes on the spot to drivers displaying a sticker and wearing a belt. They felt that this would attract many more contestants and, if conducted over a long period, provide the time necessary for young people to acquire the belt habit.

Building on a suggestion from previous groups, they responded positively to the idea that a buckle up campaign directed towards the young female, might influence our prime target, the young male. The goal here would be to persuade the young female to advise her date that she would prefer he wore his belt if she is driving with him. They all felt that this idea had merit and that this approach might work with their friends who are nonusers and who did not think that belt use is cool.

In summary, this group of young males is not typical of the group of males the *Make It Click!* campaign was trying to reach. However, they were very positive about the intent of the campaign and felt that it could be useful in reaching their unbelted friends if some changes were made the campaign's approach.

DETAILED RESULTS: FOCUS GROUP C-2

Participant Characteristics:

Ten males, ages 16-19, all students (or recent graduates) of local high schools. Seven come from military families.

Belt Use Behavior

- We always wear them (7).
- We sometimes wear them (3).
- I always wear them on the highway.
- Sometimes I just forget to put it on.
- About half of our friends wear belts.
- We all took driver ed and we had to wear them then.

Attitudes Toward Belt Use

- We all think that wearing a belt reduces the risk of injury.
- We know of cases where people would have been better off not wearing a belt but we believe you are mostly better off wearing one.
- Statistics tell you that you are better off wearing a belt.

- Statistics tell you that you are better off wearing a belt.
- We think about half the local population wear them. (2)
- We think that less than half wear them. (4)
- I think less than 25% wear them. (1)

Seat Belt Laws

- It is not a law in Alabama to wear a belt. (All)
- It isn't constitutional to have a law--it violates your rights. You should have the freedom to choose. (Several)
- You could say the same thing about speeding laws.
- It should be mandatory because it can save your life and it helps you stay behind the wheel and perhaps save someone else's life.
- Laws cut down on your freedom.
- I wear it anyway but I see where people might think it cuts down on your freedom.
- A law wouldn't make more people buckle up.
- That would depend upon how well the law was enforced.
- It should be mandatory on the highways, not in local areas. On highways there are more cars and they go faster.
- More people die on the highway.
- Don't more people get injured 200 feet from their own home?
- That statistic is misleading because that's where you do the most driving.
- You drive that route a lot and most of the time its just carelessness.
- That's a good reason to wear it.
- We agree that Alabama would be better off with a law. (7)
- More people would wear belts if there was a law. (2)
- Most people don't think they will get caught. It's like drunk driving.

- We wear them because friends of family were in accidents. (4)
- We wear them all the time or sometimes because our parents tell us to. (5)
- A lot of people our age don't think it is cool to wear belts.
- The WKMX contest was a good idea to motivate belt use.
- Publications city wide motivate people to wear belts.
- There are educational programs already in driver ed.
- I don't think here is any way you can make someone our age wear a belt. You have to want to.
- Insurance companies should give you a rebate on premiums if you wear a belt.
- How would they know that you wear them?
- Wearing a belt makes me feel safe.
- We always wear a belt if someone else is driving.
- We feel the need to be in control of a car. Definitely. (All)
- I think of my friends who were in an accident and that makes me want to wear my belt.
- I can keep control of the car with or without a belt.
- In an accident I would be able to control a car better with a belt.

Involvement with WKMX

- We all listen to WKMX.
- We all listen every day.
- We all listen in the car and occasionally at home.
- I listen to another station sometimes.
- We all participate in WKMX contents.

The Make it Click! Campaign

- We all heard about the Make It Click! contest.
- You had to have a sticker and wear a belt and you might get a prize. (Most)
- They would call your license plate number on the air.
- Didn't you have to call in when you hear the sound of the click and they took a certain number of calls?
- It was run in conjunction with McDonald's. You filled out a survey there.
- We picked up a sticker. (2)
- Usually we participate in contests but we didn't have time for this one.
- There are too many things to do.
- No way do we go to McDonald's.
- I do, but I never saw the materials at McDonald's in Enterprise.
- I saw them there. I got a sticker but didn't sign the pledge. I didn't know that the pledge came with the sticker.
- I got the sticker but didn't see the pledge.
- If we knew you were eligible for a \$1000 prize if we filled out a pledge, we would have done it. (All)
- We didn't know that. (All)
- We thought you only needed a sticker on your car. That is all you needed to do. (All)
- We didn't know about the pledge. (All):
- I think I head about t-shirts. (2)
- We never saw any. (All)
- We saw a couple of stickers around town.
- We never heard them call a winner.
- You could win \$106. (All)
- I heard nothing about \$1000. If I had I would have driven all over town.

- We didn't hear anything about the Grand Prize drawing or who won. (All)
- We would have heard it if it had been on when we were listening.
- I always listen to WKMX
- We pay attention when they are describing contents--definitely. (All)
- The disk jockey said "Make it click for cash," when he was signing off.
- I just heard about the sticker and the seat belt. May be they called out the other information when we were in school.
- The summertime would have been a better time to run this as we have more time to listen to the radio. (All)
- They didn't make this contest as big as the birthday contests they hold.
- Everyone knows about the birthday contest.
- The materials shouldn't just have been at McDonald's. They should have been all over town.
- It needed more places you could pick up the pledges and the stickers.
- Burger King or Hardees is where all the people our age go.
- McDonald's has never been the place to go--it always has been Burger King.
- WalMart would have been a good location or the shopping centers in the malls.
- A stand in the mall would have been good.
- If they had explained it well on the radio and had more places to pick up the entries we wouldn't have needed anyone to stand there telling us what to do.
- We would have had no problems in filling out pledge cars or putting stickers on cars.
- We always pay attention to contests especially when there is money involved.
- Especially when you have already have won something--you always listen for new contests.
- The stickers are OK. They could have used a little more color.
- I wouldn't put a sticker on the bumper--I'd put it on a window where you could get it off easily.
- We like the t-shirt that you have shown to us.

- The prizes were large enough.
- There's always a chance you will win.
- It would have helped if the contest had been publicized more.
- People would have worn their belts if they knew people were driving around looking for them.
- They would have got into the habit of wearing them.
- There was nothing wrong with the contest, it's just that we didn't know about it. (All)

Suggestions for Future Programs

- Contests should start when we get out of school and then go through the entire summer.
- If they had given out \$10/\$15 on the spot for wearing a belt and having a sticker, I think that kind of contest would have attracted a lot of people.
- They have done that just for having a WKMX sticker on your car--that was good.
- A lot of people got pulled over for that.
- Even a free t-shirt would have made me happy.
- A contest like that would work.
- You could have people visit the schools to hand out materials. Time out of class for it would be great.
- In school we don't hear the radio. We drive to school and then go home. In the summer we listen a lot more to the radio.
- We do more driving in the summer. And there would be more time to get the sticker.
- You need 6 months to get into the habit of wearing a belt.
- I would wear a belt if my date said she wouldn't drive with me unless I did (as long as she was OK looking).
- That approach might work with our friends who don't wear them. That would be cool.
- Maybe if the money had come out of the radio station pockets they would have been more enthusiastic about the contest.

SUMMARY GROUP D

This group was composed of eleven articulate and intelligent young men ages 21-30, who are aviators in training at Fort Rucker. They all took part in the discussion and exhibited a lot of insight and creativity. Although they all wear belts, they said that most of their family and friends do not.

They all believe that belt use reduces the risk of injury and all feel it is the smart thing to do. They felt that, as seat belt users, they portray a positive image to their peers and others. Most of them estimated that belt use in the local area is about 25%.

Most of the group believed that Alabama has a seat belt law. They also were very familiar with military regulations concerning seat belt use and the penalties for nonconformity. They were divided in their opinions as to whether a seat belt law would be effective. Some thought that most people are law abiding citizens and that many would buckle up if there was a law. However, others disagreed and said that even if there was a law there was little chance that it would be enforced in the local area and that fines in other states for this offense tended to be very low and would not be a deterrence. It was pointed out that fines for littering are very high but that people still litter. All participants are very concerned about the use of child restraints and believe firmly that there should be more enforcement of the child restraint law.

All participants were firm believers in safety value of seat belts and had became users for different reasons. Some stated it was because it was the law where they lived, others because of accidents to friends or personal experience and some mentioned that it was just a habit. When discussing motivations to promote seat belt use, they favored insurance sanctions similar to those used by the military and educational programs employing scare tactics, probably keyed to children for the greatest impact. When asked for ways to motivate the young male in particular, they noted that there is a need to persuade this target group that wearing a seat belt is "cool." They felt strongly that any authoritarian approach would be counterproductive as, at this age, young males are just emerging from years of parental and school authority. It was suggested that quite possibly the reason this age group tend not to wear belts is that they are rebelling against authority.

It was generally agreed that the best way to reach young males is to provide appropriate role models to convey to seat belt message. They felt, for example, that a good looking women asking them to buckle up would be much more effective than a police officer telling them to obey the law. They pointed to the success of beer companies who use attractive women to market their product in commercials. They suggested that other role models might be people like Arnold Schwarzenegger or other actors that appeal to this group.

This group had very limited knowledge of the Make It Click! campaign. It appears that, although they listen regularly to the WKMX program, the contest had little appeal to this group due in part, perhaps, to the fact that they dislike the idea of applying stickers to their vehicles and the prize of \$106 was not sufficient to encourage them to do so. They did see stickers and t-shirts in town and on the post but they also said that sometimes they are confined to the post for long periods of time and they could have missed a major part of the contest.

In conclusion, this group was interested in the problem of encouraging seat belt use, especially among the target group, and offered positive suggestions how this might be accomplished.

DETAILED RESULTS: FOCUS GROUP D

Participant Characteristics:

Eleven males, ages 21-30, all Warrant Officer Candidates in flight training at Fort Rucker, Alabama. None had signed pledge cards.

Belt Use Behavior

- We all wear belts.
- Our friends don't always use them, those in the military do but civilians most of the time don't.
- Our families generally do not wear belts. (most)
- My family all buckle up.
- When your children see you buckle up they do too.

Attitudes Toward Belt Use

- We all believe that wearing a belt reduced the risk of injury.
- It prevents you from going through the windshield.
- The image you convey when you wear a belt is that you are safety conscious.
- That your life is worth something.
- You're smart--its proven many times.
- Belt use is low in the area but not on the base.
- A lot of military take the belt off as soon as they leave the base.
- We see that a lot.
- Most of us feel that belt use off post in the Dothan-Enterprise area is about 25%.

Belt Laws

• The military have penalties for not wearing a belt. On the post you can get a ticketa fine and interviews with people up the chain of command. It's not a good experience.

- People get reduced in rank for repeatedly not wearing a belt.
- The military require belt use in all vehicles equipped with belts.
- Most of us believe there is a seat belt law in Alabama.
- I don't know whether there is or not.
- I believe that not wearing a seat belt is a secondary ticket. They don't give it unless you are stopped for something else.
- May be a small percentage of people would start to wear a belt if there was a law.
- A lot of people are law abiding citizens and a lot of these people would obey a seat belt law. If just a small percentage started to wear them because it is the law then it would be worth it.
- We don't think laws make people buckle up.
- Nothing is against the law until you get caught.
- I have seen people buckling up just before they get to a road block, so what good is it?
- The law enforcement people locally aren't going to give tickets to people they have grown up with. That's the way it goes here.
- In some places the fine is only \$10. That is not going to deter some people.
- Fines for littering are \$300-\$500 and people still throw stuff out of the car.
- I have never seen an officer give a ticket for nonuse of child restraints. They only give a ticket if stopped for something else.
- We are all very concerned about the use of child restraints. You see children loose in the car all the time.

Motivations

- Higher fines wouldn't make a difference. If you had what the military has--no insurance payoff if you weren't wearing a belt--then they would put them on.
- You should suspend licenses for a week.
- Seat belt use becomes a habit. I don't go anywhere without it.
- In our occupation, we are so used to putting on a harness in an aircraft you get into the habit of it.

- I wear mine because belts save lives and they only work if you use them.
- I wear mine because I have been involved in three accidents. In each case I was told by the paramedics that the belt kept me from being badly hurt. They kept me from flying through the windshield.
- I have friends that died because they were not wearing their seat belts.
- I also have two friends who were killed because they weren't wearing belts.
- I started to wear mine because the state I lived in enacted a law.
- I started to wear mine because of the laws on the base. Prior to coming here I didn't wear it.
- I worked as part of a team responding to accidents and I have seen what can happen to people when they don't wear belts.
- I wouldn't think of flying in an aircraft without a harness and it is safer up there than it is on the ground.
- Most of the military vehicles don't have seat belts and that can cause bad habits for those not involved in aviation.
- I often see a convoy going down the road and even though the jeeps are equipped with belts they aren't wearing them. I have seen the results of a jeep rolling over and it isn't a pretty sight.
- The manual in the Hummer which has replaced the jeep, specifically says to wear belts to prevent being thrown out on a turn. The seat is higher than the side of the truck and there is nothing to hold you in, but the drivers still don't wear their belts.
- In the military, if you have seat belts in the car and aren't wearing them when you have an accident, you are not covered by insurance for the injuries and you don't get anything. Therefore, I don't believe that many military personnel unbuckle in large numbers. They might forget once or twice, I have done that myself.
- I think that once people buckle up they stay buckled up whether they are on or off post.
- Military personnel make a lot of excuses for not wearing belts, like they won't fit over the equipment they are wearing.

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- Every unit has a safety program--safety first, mission second, people always.
- Some safety programs are a turnoff. We had to sit in an un-airconditioned auditorium and listen to people talking about all kinds of safety. There must be a better way than that.

- You have to find a way to make it work.
- We all see a lot of trucks in this area and usually the female is sitting in the middle next to the driver so you know she isn't belted.
- There are a lot of ranches and farms around here and you see a lot of people piled in the front seat.
- You need to motivate people when they are young. Go into the schools and teach the little kids. Officer Friendly used to come to our schools.
- They do teach some of the kids in school to wear them and it really makes them buckle up. My daughter comes home with *Make It Click!* stickers and she says to me, "Make It Click, Daddy."
- I would hate to have an accident when I was strapped in and my kids weren't.
- My children let me know real fast if I don't buckle up.
- There ought to be more commercials about the use of child restraints.
- I think more and more people are wearing belts these days because they are becoming more health conscious. The yuppies in their fancy sports cars are now beginning to buckle up.
- Education might encourage people to wear them.
- You need more commercials showing the gruesome stuff.
- Some of the stuff we got in defense driving classes might help. Like the egg in the shoebox which breaks when you shake the box but doesn't when it is taped down.
- We think "shock" commercials, graphic ones, would help.
- Show people exactly what will happen to them if they don't wear a belt.
- We love the Department of Transportation dummies. They are fine.
- The Volvo crashes which show the driver unbuckling are also good.
- Threats of enforcement aren't enough. The message has to be entertaining and educating.
- The 18-24 year-olds have just got away from authority-out of the house or out of college. The last thing they want is some authority figure or symbol of authority. Don't say you have to do this because it is good for you. That's not the answer, that's not what they want to hear. That's why they are not wearing belts.
- Radio commercials won't work as well as TV.

- People talking about their bad experiences would be good.
- People mostly wear seat belts because of bad experiences.
- My friend said he didn't need to wear a belt because in an accident he could brace himself. I was going about 5 mph at the time and I suddenly hit the brake. He went forward in the seat and when I asked him why he didn't brace himself, he said because he wasn't ready. He was very upset with me but after that I noticed he started to wear a belt.
- People think they can save themselves.
- You have to hit people close to home because that is what it took for me.
- If you want to motivate young men, you need to use the actors they look up to.
- In a few movies I see the actors wear belts and that is good and it is subliminal.
- You need a spokesperson like Arnold Schwarzenegger who promotes health.
- A good role model for young men are good looking women. "Hey, you guys, Make It Click!"
- I always remember the Bud commercials because they have those good looking ladies on them.
- You have to make it seem cool to wear belts.
- Give them commercials with women with the sexual overtones. It might be sexist to say that but it might work with this age group.
- It doesn't need to be someone famous. If she looks good and has a good body, guys are going to love her.
- You could even use local girls.
- I believe insurance sanctions are the best way to persuade young males to wear belts. Hit them where their money is.
- Insurance companies should make seat belt use mandatory.
- You should publicize the winner of the *Make It Click!* contest. See, this person still wears a belt and is still alive.
- I know I am wearing my belt and if I can pass this habit along to a friend, that's the best I can do.

- The Mercedes ads are good where the driver does weird things with the car and is shown unbuckling his belt when he gets out. It also demonstrates that a belt keeps you in control of the vehicle.
- Seat belts also keep you in control of the car--not necessarily in an accident but if you run off the road somewhere you can get tossed out of your seat but a belt keeps you in front of the wheel.
- Yes we all feel that seat belts keep you in better control of a car.

Involvement with WKMX

- We have all heard of WKMX.
- Most of us listen to it on a regular basis.
- We all listen to it in the car.
- We sometimes listen to it at home.
- I don't--I only like heavy metal.
- WKMX has a range from 1.05 to 1.08 so it is hard to miss. It is the clearest station and has the least interference.
- We participate in their contests. (2)

The Make It Click! Campaign

- We heard the Make It Click! contest on the radio. (2)
- I listen to the radio but don't remember hearing the contest.
- Maybe the contest was when we were on the post for a long time and didn't get into town.
- We saw the stickers (4)
- I saw bumper stickers in one of the fast food restaurants. If you had a sticker on your car and were wearing a seat belt the radio station would pull you over and give you a prize. \$106. I took the sticker but didn't put it on my car because I have a new vehicle and it devalues the car. I didn't read the rules on the back as I had no intention of putting on my car. I didn't see anything else besides the stickers.
- We would never put a sticker on our cars. (6)
- Just say no to drugs, make it click, hug your child, I love my dog, 55 stay alive--pretty soon no one can see your car.

- We all go into McDonald's. We did not see the stickers. (Most)
- I might have seen them.
- I just guessed that the prize was \$106. Radio stations always award prizes that equal their frequency number.
- I have never seen the radio station van.
- We saw t-shirts around the post. (2)

Suggestions for Future Programs

- A lot of people don't believe they can win and that is why they don't enter contests. It's like the lottery.
- With regard to the pledges, a lot of people don't like to put their names on things.
- Some people might think it silly to have to sign a pledge to wear a belt when they already wear one.
- Knowing my luck, \$106 is not enough money to make me put a sticker on my car.
- \$500? Now we're talking.
- That might change some people's minds.

SUMMARY FOCUS GROUP E

This group was composed of 3 females and 2 males between the ages of 22-35 and was intended to target "all other" civilians, ages and sexes. During the discussions it what apparent that all members had a close association with the military and the participants were certainly not typical of the Dothan-Enterprise population. However, they did present a point of view probably representative of the quite large military population of Enterprise.

All but one of the participants are regular belt users. The nonuser said that he only wore the belt under what he considered to be risk conditions--highway driving or poor weather. Most of their peers wear belts opposed to their families who were generally nonwearers.

They were in agreement that safety belt use reduces the risk of injury and they saw no negative images associated with wearing belts in fact they felt they demonstrated a concern for safety. Most felt that belt use in the area was between 40-60% while the two remaining participants estimated use at about 10%.

With regard to the seat belt laws, most agreed that Alabama does not have a law while two thought that it did. All members of the group were in agreement that it would be better if more people wore belts. However, there was disagreement among the participants as to whether a belt law would encourage use. Some thought it would but others were adamantly opposed to the government enacting laws to change human behaviors which do not endanger others. However, all participants were in favor of the child restraint laws which they felt need more enforcement.

In discussing motivations for using belts, driver education programs were cited as influencing some of the group to buckle up. Others said that family members had motivated them to wear a belt. The effectiveness of public safety messages were discussed at length with the group split in their opinion of the usefulness of these messages, although the group seemed to be very familiar with a number of the recent seat belt commercials. Several people recommended that children should be educated in seat belt use at an early age. The possibility of insurance companies providing monetary rewards for seat belt use was mentioned. They all felt that belts keep the driver in control of the car.

It was apparent that they were all quite familiar with the WKMX radio station and with the Make It Click! campaign. They had no difficulty in recalling details of the campaign although only one of the participants had entered the contest. Several expressed their dislike of putting stickers on their cars. There was a general feeling that in future campaigns an alternative such a ribbon on the antenna on the car would be preferable.

In summary, this group endorsed the usefulness of seat belts and saw a need to persuade the general population to use them. However, they differed in their views as to how this might be achieved, and said that it is especially difficult to motivate young people to adopt safe behaviors.

DETAILED RESULTS: FOCUS GROUP E

Participant Characteristics:

Three females, two males, ages 22-35. All of this group are involved with the military (military or spouse of military or retired military).

Belt Use Behavior

- We all use belts all the time. (4)
- I use a belt occasionally. I use it any time the children are in the car. I also wear it on long trips at highway speeds or under rain or slick conditions.
- Most of our friends wear belts. (All)
- My family wear belts.
- My parents never wear them.
- I have to remind my kids or they won't.
- Some of my family wear belts--my grandmother chooses not to. My mother only wears it if she is driving through a state in which it is law. My grandmother still won't wear hers though.

Attitudes Toward Belt Use

- We think it reduces injury risk in an accident. (All)
- I think that how much protection they give you depends on the severity of the accident. A good friend of mine died from internal injuries caused by the seat belt.
- My sister was in an accident in which she would have died if she had been belted. She flew out of the sun roof and if she had stayed in the car she would have been crushed. They say those types of accidents are few though.
- I think belts help because they keep you in the car and in position.
- I wear them sometimes because I have never developed a habit of buckling up when I get into the car. When I get nervous I automatically think that I had better put on my belt. I had an accident--not wearing a belt. I hit a telephone pole doing about 60 mph. I went through the windshield--it was a nasty ordeal. So when I get into a situation where I feel that I might lose control of the car or someone else might lose control of the car, then I put on a belt. I have no doubt about the usefulness of the belt. I am an ex pilot and I wouldn't dream of getting in a plane without a belt.

- I feel that if I don't have my belt on I am falling out of the car.
- I think that you portray the image of safety when you wear a belt.
- There are no negative images associated with wearing one. (All)
- We think between 40-60% of people in this area buckle up. (3)
- We think only about 10% wear them. (2)
- Only in the military area is it high.

Seat Belt Laws

- We think Alabama has a mandatory belt law. (2)
- We don't think there is a law. (3)
- We think there is a law for children. (2)
- On the base you have to wear them.
- A belt law would help eventually. Not at first but if it was enforced more people would wear them.
- A law couldn't hurt.
- It has to be better.
- I don't think there would be a dramatic increase because of a law. If you had some programs that encourage belt use that might help, but just a law wouldn't do it.
- If you consider this area which is in the south and rural, people tend to have very basic ideas and I don't think a law would make them put on belts.
- If a law just saves a few lives then it is worth it.
- If police officers have to spend their time enforcing seat belt laws, it is taking them away from other things. We don't have a large enough police force. I don't believe in trying to change a social mind set with laws like that.
- I totally disagree with any action that forces me to do anything. That is why a law would not work. I am not alone in that position.
- The government is not designed to force people to do things. It's not their responsibility. I need someone to convince me that by me not wearing a belt I am endangering someone else. Lots of things endanger the collective pocketbook so where are they going to stop.

- I am in agreement that people should wear belts but there is a better way to make them wear them than legislation.
- I think a more subtle approach would be better.
- Police should enforce the child seat law. It is awful to see kids unrestrained in the front seat of a car. It drives me up the wall. I have stopped at red lights and asked people to put their children in seats. I ask, "Do you want that child to die?"
- Children in seats are less distracting to the driver.
- Florida has a secondary seat belt law--they won't stop you for not wearing it but if you are stopped for something else they give you a ticket.
- Alabama has a law which requires driver education for you to graduate.

Motivations

- The years 16-24 tend to be rebellious years for young people. If they are told to do something they won't.
- I think as you get older you think about dangers more.
- Those awful pictures that we saw in driver's education make you realize how much belts can help in an accident. I didn't see anyone in my driver ed class that didn't start wearing a belt after that. I wore it before the class because my stepfather used to make me.
- My sister works for a company that is very safety conscious and she started us wearing belts. She wouldn't start the car until you put your belt on. It's a law here on the post so it becomes a habit. You read and see so many things you decide its the best thing to do. It's not that big a deal.
- I started wearing mine because I was in flight school. Buckling up before flying puts you in the habit. Then I saw a really severe automobile accident and I felt that if I was in an accident I wanted them to at least be able to find me by staying with the car. In that accident they weren't buckled up.
- I don't think commercials help. I think seeing a wreck or having a personal experience makes the difference. It's just like the "Just Say No" campaign-commercials don't work.
- I think commercials showing accidents might help. In Germany some of the ones we saw were pretty awful.
- You see those dummies on TV but they don't make a big impression on me. I think the role model celebrity type commercial would make more impression on the young male.

- I find the commercial about drug use like the fried egg commercial, leads me to talk to my kids about drug abuse. It reminds me that I need to continue discussing it with them.
- I agree. My 7-year old saw my husband have one beer and although we didn't leave for 3 hours she was adamant that Daddy can't drive. TV ads really affect her.
- Once they get older, though, peer pressure comes in.
- Definitely, that's why the young male don't wear belts and they drink and drive.
- I don't see many belt commercials in this area.
- There was a good one with Barbara Mandrell that was excellent. She talked about her accident when she was hit by a drunk driver and she and her kids had on their belts.
- Chrysler and Volvo both have good ads.
- My mother's excuse is that a belt wrinkles her clothes. They have an ad about that where a nurse is smoothing the wrinkles out of the clothes of a women injured in an accident in which she wasn't wearing a belt for that reason.
- It's pretty expensive to put ads on in prime time.
- I don't think young people get turned off by commercials they just tune out.
- Insurance rewards might do it. But I don't know how you could prove that you wear a belt.
- Education starting at a very early age might help. It is hard to change habits in the older generation.
- I think education has to start at home. You have to direct programs to parents so that they will make their kids wear belts. Parents have to set an example.
- My family influenced me to wear a belt.
- I told my daughter the first time she was able to drive that if ever I saw her, or anyone saw her, without a belt that would mean no more car.
- I was involved recently in an accident and the belt kept me in control. If I hadn't been wearing it I could have been seriously hurt.
- Belts help you to control the car so you can perhaps avoid injuring someone else.
- I don't buy that belts keep you in control of a car.

Involvement With WKMX

- We all listen to this station. (All)
- We listen all the time. (All)
- We mostly listen in the car.
- I listen in the car and in my room.
- I always participate in their contests.

The Make It Click! Campaign

- We were aware of the Make It Click! campaign. (All)
- You could stop at several locations and pick up a sticker. If you had it on your car and were wearing a belt and they saw you they would call your tag number over the radio and you could win a prize. (Several)
- I didn't see any stickers where I could pick one up.
- We saw stickers on cars.
- We wouldn't put a sticker on our cars. It degrades the car. (2)
- I would put one in my window.
- I would tape it to a window. But I don't find it attractive. I am not that hard up that I would use a sticker to win money.
- I think the red ribbon tied to the antenna was a good idea.
- That concept would be more acceptable to me. I don't like stickers on my car.
- I saw people wearing t-shirts.
- I entered the contest but I didn't see any t-shirts.
- I didn't have time to enter the contest.
- I don't think any particular disk jockey stood out.
- I remember B.J. Kelley.
- We heard winners announced.
- I heard the grand prize winner on the radio.

SUMMARY FOCUS GROUP F

The participants in this group were recruited as "all other" ages and sex. The group was composed of 3 females and 6 males between the ages of 24-56. They were all civilians (one was retired from the military). One of the group said that he might have signed a pledge but was not sure. The remaining members had not signed a pledge form.

The majority of the group were regular belt users. Three said they were sometime users and one participant said that she did not wear a safety belt at all. Most of the group also said that either most or some of their friends and family wore belts. Two of the participants said that all their friends were belts and one said that all his family buckled up.

Most of the group believe that you are better off wearing a seat belt. They estimated the area use to be between 20-30% except for the military where most people buckle up because of military requirements. They were all aware that there is no safety belt law in Alabama and most thought that such a law would be a good idea. One participant cited the success that Florida had had in legislating seat belt use. Those opposing a law said that adults should be able to choose whether or nor to wear a belt and said that it was a violation of individual rights to make him or her wear a belt. They all expressed concern about children riding unrestrained in cars and felt there should be more enforcement of the current law for children.

The reason given for wearing a belt by those who are regular users was personal experience with, or observation of, automobile accidents. One of the sometime users said that his job as a letter carrier precluded its use. Another said that he doesn't remember to put it on and the third person said that she had mixed feelings about the usefulness of a safety belt. The nonwearer was adamantly opposed to belt use as a result of a personal experience in which she was told by medics that not wearing a belt saved her life.

In discussing motivations for belt use, the point was made that young people lack appreciation of the dangers they face when riding in an automobile. Some felt that people get immune to public service announcements and that educational programs should be directed towards children in school. There was a general feeling that if insurance companies gave monetary inducements to policyholders, it might be a very effective way to increase belt use and, at the same time, allow people freedom of choice.

As mentioned previously, this was an older group and as such, they do not listen very much to WKMX as this station generally appeals to younger people. They had heard about the *Make It Click!* contest but were not very familiar with its details. Although two of the group had participated to some extent, others said they tend to tune out such contests. A general reluctance to put a sticker on a car was also mentioned. Two of the group said they might have participated in the contest if they had known its details.

With regard to future programs, they generally felt that contests designed to reach the young should take place in the summer when they are out of school and driving in an automobile more often. They also felt that this contest probably needed more promotion.

In summary, the group were interested in the topic of safety belt use and most agreed that wearing a belt reduced the risk of injury. However, they appeared to have little knowledge of the *Make It Click!* campaign and the contest did not seem to have very much appeal to this older group.

DETAILED RESULTS: FOCUS GROUP F

Participant Characteristics:

Three females, 6 males, ages 24-56. All nonmilitary.

Belt Use Behavior

- We always wear our belt. (5)
- We sometimes wear it. (3)
- I never wear mine.
- All of our friends wear belts. (2)
- Some of our friends wear them. (5)
- Most of our friends don't wear them. (2)
- I encourage them to wear them in my car. I feel responsible for them.
- All my family wear belts.
- My parents and older family members don't wear belts.
- Most of my family don't wear belts.
- Some of my family wear them. (4)
- My children and grandchildren wear them. They were brought up that way.
- None of my family wears them.

Attitudes Toward Belt Use

- Most of us believe that you are better off with belts.
- We believe that the area use is about 20-30%. Most of the military wear belts.

Belt Laws

- We believe that there is no belt law in Alabama. (Most)
- I heard that they are going to try to make it a law.
- They tried once but it didn't go through.
- I think a law would eventually make people buckle up. It takes a while. I know that in Florida it took some time before people started to obey it. They were totally against it at the beginning but after a while the public get over their outrage.
- They would have to enforce a belt law. Just passing it wouldn't make people wear them unless they knew that the police were out there giving tickets.
- If after the second or third time that they got a \$20-\$50 fine they would think twice before not wearing it.
- In Florida they don't enforce the law. Only if you are stopped for another offense do they give you a ticket.
- A seat belt law is a good idea. (All)
- I am concerned about the number of people in the area who allow their kids to ride in the car standing up.
- That makes me crazy.
- I saw that just yesterday. Two kids standing up and their mother trying to drive and stop them from fighting. She was swerving all over the road.
- When I see them I want to pull them over and speak to them. Sometimes I do.
- If an adult chooses not to wear a belt that's OK, but they should put their kids in seats.
- I have seen a kid who has gone through a windshield and it isn't too pretty.
- It should be against the law to have a child loose in the back of a pickup truck.
- I think wearing a belt is up to the person. If they want to wear it, fine. I don't think anyone should make me wear mine or tell me I have to do it.
- The good old government crams all that stuff down our throat. They said in 1964 we are going to put seat belts in cars and everyone is going to use them. It's like cigarettes. I am violating your rights if I smoke in here but you are violating mine by not letting me. Belt use should be optional. I agree with a belt law for children but adults should have the choice.

- Laws by themselves are somewhat ineffective. I have some sympathy with the idea that we shouldn't try to regulate everything through laws. But there should be a monetary penalty and that way you pay your money and you take your choice. If they don't wear them they have to suffer a differential insurance rate. It is a statistical fact that nonwearers are going to suffer more serious injury. Therefore, they should pay higher insurance rates. This leaves it up to the person.
- My father will never wear a belt and he would choose a higher insurance rate.
- You have the option to obey or not obey the law. It is up to you.

Motivations

- I wear mine now because I had two accidents. Both times the belt saved my life. They are specially good in the big two-ton trucks I drive. If you have to stop suddenly there is nothing to hold you unless you are wearing a belt.
- I wear mine because I have read about accidents whereby people wouldn't have died if they had been wearing a belt. That convinced me.
- I like the feeling of security. It stops you from sliding all over the car. I wear belts when I fly and I like the idea of being held in my seat.
- I started to wear mine when I was in the military. Now I am an EMT and I see a lot of people who owe their lives to a seat belt. I have seen people who would have gone through the window if it weren't for the seat belt. It's a habit with me.
- I wear mine all the time. I have had eight people I know who have been killed in accidents. One was just two months ago. A good friend of my mother-the driver ran the car off the road. She was thrown out of the car but my mother's friend was belted and stayed in the car. I am a service technician and travel around the country a lot and I see a wreck just about every day.
- I only wear it sometimes because I just don't think about it. I have never been in an accident and I just don't think about my belt.
- I only wear it part time because I am a letter carrier and I have to sit in the middle of the seat to deliver the mail.
- I seldom wear mine. I have mixed feelings about it. I sometimes think about all the crazy drivers out there, but if you get into a real bad accident the belt could be a hinderance. I have heard of a lot of people who were thrown clear and lived whereby if they had stayed in the car they might have got squashed.
- I don't believe in belts and I never wear one. I was in a wreck and the paramedics told me when they pulled me out that if I had been wearing a belt I wouldn't be sitting here. I was thrown over into the crack between the seats and that saved me.

- If you rode with the ambulances like I did, it would motivate people to buckle up. They would change their minds real quick.
- The dummy commercials are good. I like those.
- I think they are too cute--they are too commercial.
- I think that sometimes people get a little immune to public service ads on TV.
- There are a lot of negative things on TV. Cars flying through the air and drivers essentially being invincible. They portray the image that you just can't get hurt in cars.
- I think it would be more effective to have educational programs in schools. You could have pictures of how people look when they have been in an accident. You wouldn't want to show that kind of stuff on TV.
- Grade school programs especially directed towards children would help. The children might, in turn, put pressure on their parents to wear belts.
- I spent the last two weeks counseling the young couple that hit a little girl recently. Most teenagers think that as long as they do everything right they will be OK. They do not realize that other drivers do unexpected things.
- What young people lack is any kind of appreciation that there are any number of people on the road who do crazy things and don't obey the rules. Even if they do the right thing it doesn't always protect that. It's an appreciation of the unexpected.
- As I was once a 16-year old, some time ago, I know I had a lack of knowledge of my own mortality. I thought that as a 16-year old nothing was going to happen to me. Then I saw friends in high school get killed and it drove home the point that you are not invincible.
- You can be totally in the right and still get killed.
- You have to learn how to be a defensive driver and not take anything for granted out there.
- I think you should get after the insurance companies and have them give inducements for wearing a belt. A 10-15% reduction in premium would be like money in the bank. They give incentives for other kinds of behavior.
- The military insurance companies say that if you are in an accident and not wearing a belt they will not pay off.
- I think that is a good idea.

- I definitely feel more in control of a car with a belt. Experience has shown me that it keeps you secure behind the wheel in different situations. You don't slide away from the wheel.
- I really don't understand the slogan "seat belts keep you in control."
- There might be a negative effect. People might feel more daring in a seat belt.

Involvement with WKMX

- We don't listen to WKMX. (3)
- We listen sometimes. (4)
- We listen all the time. (2)
- I listen to public radio.
- I used to listen to it but I got tired of it.
- They don't play any spiritual music on it.
- We participate in the contests, especially we listen to the birthday contest. We know people who have won. (4)

The Make It Click! Campaign

- We heard about the contest.
- We don't remember the campaign much.
- Sometimes we tune things out on the radio and just don't listen.
- We might have participated if we had known about it. (2)
- We wouldn't have. (Rest)
- We saw the bumper stickers around town.
- I have a bumper sticker on the back of my car but I was never stopped.
- I had a sticker on my truck bumper. It was awful to get off. I didn't know that it was supposed to go on the window. I never read instructions, its too much trouble.
- I don't put stickers on the outside of my car. I put them on the front windshield so I can get them off easier.

- In Virginia, they give you a ticket for putting a sticker on your window.
- We really don't remember anything about a pledge.
- I remember filling out a pledge at McDonald's.

Suggestions For Future Programs

- If you want to reach the young, it would be better to hold the campaign in the summer.
- The prize money was enough. The time of the year was wrong. People tend to drive more in the summer.
- Some years ago WKMX had a contest where they would stop you and give you money if you had their sticker on your car.
- The contest probably needed more promotion.